

acatatggcg acacatttct gccaaccccc agcagctatg atgaacttta ctatgagatt  
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<210> 970

<211> 263

<212> PRT

<213> Homo sapiens

<400> 970

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			20					25					30		
Leu	Thr	Leu	Pro	Ser	Leu	Val	Cys	Glu	Val	Leu	Asp	Leu	Met	Val	Glu
		35					40					45			
Phe	Ile	Val	Thr	His	Met	Met	Lys	Glu	Phe	Pro	Met	Asp	Leu	Tyr	Ile
	50					55					60				
Arg	Cys	Ile	Gln	Val	Val	His	Lys	Leu	Leu	Cys	Tyr	Gln	Lys	Lys	Cys
65					70					75					80
Arg	Val	Arg	Leu	His	Tyr	Thr	Trp	Arg	Glu	Leu	Trp	Ser	Ala	Leu	Ile
				85					90					95	
Asn	Leu	Leu	Lys	Phe	Leu	Met	Ser	Asn	Glu	Thr	Val	Leu	Leu	Ala	Lys
			100					105					110		
His	Asn	Ile	Phe	Thr	Leu	Ala	Leu	Met	Ile	Val	Asn	Leu	Phe	Asn	Met
		115						120					125		
Phe	Ile	Thr	Tyr	Gly	Asp	Thr	Phe	Leu	Pro	Thr	Pro	Ser	Ser	Tyr	Asp
	130					135					140				
Glu	Leu	Tyr	Tyr	Glu	Ile	Arg	Met	His	Gln	Ser	Phe	Asp	Asn	Leu	
145					150				155					160	
Tyr	Ser	Met	Val	Leu	Arg	Leu	Ser	Thr	Asn	Ala	Gly	Gln	Trp	Lys	Glu
				165					170					175	
Ala	Ala	Ser	Lys	Val	Thr	His	Ala	Leu	Val	Asn	Ile	Arg	Ala	Ile	Ile
			180					185					190		
Asn	His	Phe	Asn	Pro	Lys	Ile	Glu	Ser	Tyr	Ala	Ala	Val	Asn	His	Ile
		195					200					205			
Ser	Gln	Leu	Ser	Glu	Glu	Gln	Val	Leu	Glu	Val	Val	Arg	Ala	Asn	Tyr
	210					215					220				
Asp	Thr	Leu	Thr	Leu	Lys	Gln	Asp	Gly	Leu	Asp	Gln	Tyr	Glu	Arg	
225					230				235					240	
Tyr	Ser	Glu	Gln	His	Lys	Glu	Ala	Ala	Phe	Phe	Lys	Glu	Leu	Val	Arg
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260

<210> 971  
 <211> 337  
 <212> DNA  
 <213> Homo sapiens

<400> 971  
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 337

<210> 972  
 <211> 112  
 <212> PRT  
 <213> Homo sapiens

<400> 972  
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 Asp Ser Gly Leu Arg Gly Arg Gly Gly Ala Gly Phe Pro Thr Gly Val  
 20 25 30  
 Lys Trp Ser Phe Val Pro Gln Asn Asn Pro Asn Pro Lys Tyr Leu Val  
 35 40 45  
 Val Asn Gly Asp Glu Ser Glu Pro Gly Thr Cys Lys Asp Met Pro Leu  
 50 55 60  
 Ile Met Ala Ser Pro His Thr Leu Val Glu Gly Ala Leu Ile Ser Arg  
 65 70 75 80  
 Tyr Ala Phe Gly Ser Glu Gln Ala Phe Ile Tyr Leu Arg Gly Glu Val  
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 Val Gln Val Ala Arg Arg Leu Glu Glu Lys Lys Lys Met Arg Xaa Xaa  
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<210> 973  
 <211> 360  
 <212> DNA  
 <213> Homo sapiens

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 120  
 ccgggacctt ctgtataggc atcacttagg aaccagtcag accatcagat tctcaggacc  
 180

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 240  
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<210> 974

<211> 91

<212> PRT

<213> Homo sapiens

<400> 974

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Tyr	Arg	His	His	Leu	Gly	Thr	Ser	Gln	Thr	Ile	Arg	Phe	Ser	Gly	Pro
			20					25					30		
Thr	Gly	Ser	Thr	Glu	Ser	Gly	Thr	Gln	Gly	Phe	Gln	His	Ile	Leu	Arg
		35				40					45				
Gly	Asp	Ser	Ser	Gly	Cys	Val	Thr	Leu	Arg	Thr	Thr	Gly	Lys	Val	Ala
	50				55					60					
Leu	Gly	Ser	Glu	Ile	Arg	Val	His	Ile	Leu	Gly	Leu	Pro	Leu	Thr	Asp
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Cys	Asn	Gly	Gly	Gln	Val	Thr	Cys	Arg	Ala	Gln					
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<210> 975

<211> 2604

<212> DNA

<213> Homo sapiens

<400> 975

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 240  
 tgaccagcca cgatgcaggt tgaagaagcc accggtcagg ctgcgggccg tcgtcgggga  
 300  
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 420  
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 480  
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 540  
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 660

ttt gatcaag gtctggatgt agt gctggat gacaatcaga atgtgcatga tgtggctgca  
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2160  
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2280



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 2604

<210> 976

<211> 411

<212> PRT

<213> Homo sapiens

<400> 976

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			20					25					30		
Arg	Arg	Asn	Glu	Pro	Thr	Leu	Pro	Arg	Glu	Phe	Thr	Arg	Arg	Gly	Arg
		35					40					45			
Arg	Gly	Ala	Val	Ser	Val	Asp	Ser	Leu	Ala	Glu	Leu	Glu	Asp	Gly	Ala
	50					55					60				
Leu	Leu	Leu	Gln	Thr	Leu	Gln	Leu	Ser	Lys	Ile	Ser	Phe	Pro	Ile	Gly
65					70					75				80	
Gln	Arg	Leu	Leu	Gly	Ser	Lys	Arg	Lys	Met	Ser	Leu	Asn	Pro	Ile	Ala
			85						90					95	
Lys	Gln	Ile	Pro	Gln	Val	Val	Glu	Ala	Cys	Cys	Gln	Phe	Ile	Glu	Lys
			100					105					110		
His	Gly	Leu	Ser	Ala	Val	Gly	Ile	Phe	Thr	Leu	Glu	Tyr	Ser	Val	Gln
	115						120					125			
Arg	Val	Arg	Gln	Leu	Arg	Glu	Glu	Phe	Asp	Gln	Gly	Leu	Asp	Val	Val
	130					135					140				
Leu	Asp	Asp	Asn	Gln	Asn	Val	His	Asp	Val	Ala	Ala	Leu	Leu	Lys	Glu
145					150					155				160	
Phe	Phe	Arg	Asp	Met	Lys	Asp	Ser	Leu	Leu	Pro	Asp	Asp	Leu	Tyr	Met
			165						170					175	
Ser	Phe	Leu	Leu	Thr	Ala	Thr	Leu	Lys	Pro	Gln	Asp	Gln	Leu	Ser	Ala
		180						185					190		
Leu	Gln	Leu	Leu	Val	Tyr	Leu	Thr	Pro	Pro	Cys	His	Ser	Asp	Thr	Leu
	195						200					205			
Glu	Arg	Leu	Leu	Lys	Ala	Leu	His	Lys	Ile	Thr	Glu	Asn	Cys	Glu	Asp
	210					215					220				
Ser	Ile	Gly	Ile	Asp	Gly	Gln	Leu	Val	Pro	Gly	Asn	Arg	Met	Thr	Ser
225					230					235				240	
Thr	Asn	Leu	Ala	Leu	Val	Phe	Gly	Ser	Ala	Leu	Leu	Lys	Lys	Gly	Lys
			245						250					255	
Phe	Gly	Lys	Arg	Glu	Ser	Arg	Lys	Thr	Lys	Leu	Gly	Ile	Asp	His	Tyr
	260						265					270			
Val	Ala	Ser	Val	Asn	Val	Val	Arg	Ala	Met	Ile	Asp	Asn	Trp	Asp	Val

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      275              280              285
Leu Phe Gln Val Pro Pro His Ile Gln Arg Gln Val Ala Lys Arg Val
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Trp Lys Ser Ser Pro Glu Ala Leu Asp Phe Ile Arg Arg Arg Asn Leu
305              310              315              320
Arg Lys Ile Gln Ser Ala Arg Ile Lys Met Glu Glu Asp Ala Leu Leu
      325              330              335
Ser Asp Pro Val Glu Thr Ser Ala Glu Ala Arg Ala Ala Val Leu Ala
 340              345              350
Gln Ser Lys Pro Ser Asp Glu Gly Ser Ser Glu Glu Pro Ala Val Pro
 355              360              365
Ser Gly Thr Ala Arg Ser His Asp Asp Glu Glu Gly Ala Gly Asn Pro
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Pro Ile Pro Glu Gln Asp Arg Pro Leu Leu Arg Val Pro Arg Glu Lys
385              390              395              400
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<210> 977  
 <211> 378  
 <212> DNA  
 <213> Homo sapiens

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378

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<210> 978  
 <211> 126  
 <212> PRT  
 <213> Homo sapiens

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<400> 978
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Glu Met Pro Ser Arg Thr Leu Arg Gln Ala Ser His Glu Ser Ile Glu
      20              25              30
Asp Ser Met Asn Ser Tyr Gly Ser Glu Gly Asn Leu Asn Tyr Gly Gly
      35              40              45
Val Cys Leu Ala Ser Asp Ala Gln Phe Ser Asp Phe Leu Gly Ser Met
      50              55              60
Gly Pro Ala Gln Phe Val Gly Arg Gln Thr Leu Ala Thr Thr Pro Met

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65		70		75		80			
Gly	Asp	Val	Glu	Ile	Gly	Leu	Gln	Glu	Val
				85		90		95	
Asp	Ile	Ile	Gln	Ala	Arg	Gly	Leu	Thr	Ala
				100		105		110	
Leu	Pro	Ala	Ala	Tyr	Ile	Lys	Ala	Tyr	Leu
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<210> 979  
 <211> 3500  
 <212> DNA  
 <213> Homo sapiens

<400> 979  
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<210> 982

<211> 134

<212> PRT

<213> Homo sapiens

<400> 982

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Thr	Ala	Pro	Val	Gly	Trp	Glu	Leu	Val	Arg	Val	Glu	His	Val	Glu	Leu
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Asp	Asp	Glu	Asp	Val	Asp	Asp	Glu	Asn	Thr	Asp	Ile	Thr	Ala	Leu	Ala
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Leu Asp Asn Gln Ile Phe Ile Asp Tyr Ala Lys Leu Ile Lys Glu Ser			
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&lt;210&gt; 987

&lt;211&gt; 4224

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 987

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 <213> Homo sapiens

<400> 988

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			20					25					30		
Met	Leu	Leu	Arg	Gly	Leu	Thr	Gln	Ile	Gln	Ser	Arg	Ile	Leu	Gly	Pro
			35				40					45			
Gly	Arg	Lys	Cys	Cys	Ala	Leu	Ala	Asn	Leu	Ala	Asp	Met	Leu	Thr	Val
			50			55					60				
Phe	Ala	Leu	Thr	Glu	Asp	Asp	Pro	Gln	Glu	Val	Ser	Ala	Thr	Val	Tyr
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Leu	Asp	Lys	Leu	Ala	Thr	Val	Ile	Ser	Val	Trp	Asn	Ser	Asp	Thr	Gln
				85					90					95	
Asn	Pro	Tyr	His	Gln	Gln	Ala	Leu	Ala	Glu	Lys	Val	Lys	Glu	Ala	Glu
			100					105					110		
Arg	Asp	Val	Ser	Leu	Thr	Ser	Leu	Ala	Lys	Leu	Pro	Ser	Glu	Thr	Ile
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Phe	Val	Gly	Cys	Glu	Phe	Leu	His	His	Leu	Leu	Arg	Glu	Trp	Gly	Glu
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Glu	Leu	Gln	Ala	Val	Leu	Arg	Ser	Ser	Gln	Gly	Thr	Ser	Tyr	Asp	Ser
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Tyr	Arg	Leu	Cys	Asp	Ser	Leu	Thr	Ser	Phe	Ser	Gln	Asn	Ala	Thr	Leu
				165					170					175	
Tyr	Leu	Asn	Arg	Thr	Ser	Leu	Ser	Lys	Glu	Asp	Arg	Gln	Val	Val	Ser
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Glu	Leu	Ala	Glu	Cys	Val	Arg	Asp	Phe	Leu	Arg	Lys	Thr	Ser	Thr	Val
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Val	Ile	Gln	Gln	Lys	Met	Asp	Arg	His	Met	Glu	Val	Cys	Tyr	Ile	Phe
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Trp	Gly	Arg	Lys	Gly	Leu	Ser	Glu	Lys	Leu	Leu	Ala	Tyr	Val	Glu	Gly
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Phe	Gln	Glu	Asp	Leu	Asn	Thr	Thr	Phe	Asn	Gln	Leu	Thr	Gln	Ser	Ala
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Ile	Val	His	Pro	Glu	Val	Thr	Val	Lys	Lys	Met	Cys	Ser	Leu	Ala	Val

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Pro Ala Leu Arg Phe Val Glu Val Gln Gly Pro Asn Ser Ser Ala Thr				400
		405		410
Phe Met Val Ser Cys Leu Lys Glu Thr Val Trp Met Lys Phe Ser Thr				415
		420		425
Pro Lys Glu Glu Lys Gln Phe Leu Glu Leu Leu Asn Cys Leu Met Ser				430
		435		440
Pro Val Lys Pro Gln Gly Ile Pro Val Ala Ala Leu Leu Glu Pro Asp				445
		450		455
Glu Val Leu Lys Glu Phe Val Leu Pro Phe Leu Arg Leu Asp Val Glu				460
465		470		475
Glu Val Asp Leu Ser Leu Arg Ile Phe Ile Gln Thr Leu Glu Ala Asn				480
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Ala Cys Arg Glu Glu Tyr Trp Leu Gln Thr Cys Ser Pro Phe Pro Leu				495
		500		505
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Leu Pro Lys Glu Lys Arg Cys Leu Ser Leu Asp Arg Lys Asp Leu Ala				525
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Ile His Ile Leu Glu Leu Cys Glu Ile Val Ser Ala Asn Ala Glu				540
545		550		555
Thr Phe Ser Pro Asp Val Trp Ile Lys Ser Leu Ser Trp Leu His Arg				560
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Lys Leu Glu Gln Leu Asp Trp Thr Val Gly Leu Arg Leu Lys Ser Phe				575
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Cys Lys Leu Ser Glu Asp Glu Trp Thr Ser Gln Ala His Pro Gly Tyr				605
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Ser Gly Ile Ser Glu Arg Met Leu Ser Leu Leu Val Val Asp Val Gly				640
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Val Gln Val Met Pro Trp Cys Ser Pro Gln Glu Trp Gln Arg Leu His				670
		675		680
Gln Leu Thr Arg Arg Leu Leu Glu Lys Gln Leu Leu His Val Pro Tyr				685
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His Val Val Lys Leu Leu Cys Gly Ser Leu Thr Arg Leu Leu Asp Ser				750
		755		760
Val Arg Ala Ile Gln Ala Ala Gly Pro Trp Val Gln Gly Pro Glu Gln				765
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Asp Leu Thr Gln Glu Ala Leu Phe Val Tyr Thr Gln Val Phe Cys His				780
785		790		795
Ala Leu His Ile Met Ala Met Leu His Pro Glu Val Cys Glu Pro Leu				800

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Tyr	Val	Leu	Ala	Leu	Glu	Thr	Leu	Thr	Cys	Tyr	Glu	Thr	Leu	Ser	Lys	
			820					825					830			
Thr	Asn	Pro	Ser	Val	Ser	Ser	Leu	Leu	Gln	Arg	Ala	His	Glu	Gln	Cys	
		835					840					845				
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<212> DNA
<213> Homo sapiens
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 Lys Ser Ala Phe Leu Pro Leu Ile Ala Gln Phe Leu Gly Val Asp Gly  
 35 40 45  
 Tyr Trp Leu Thr Thr Gly Asn Thr Glu Asp Ser Phe Arg Glu Ser Asp  
 50 55 60  
 Val Phe Ser Pro Thr Val Val Ser Ala Glu Ser Thr Asp Gln Tyr Val  
 65 70 75 80  
 Trp Ile Glu Val Val Glu Ala Asn Phe Ser Cys Gly Thr Gly Glu Ser  
 85 90 95  
 Ile Glu Phe His Phe Asp Ala Ile Asn Gly Lys Ile Pro Phe Pro Ala  
 100 105 110  
 Ser Phe Phe Lys Glu Lys Arg  
 115

<210> 993  
 <211> 450  
 <212> DNA  
 <213> Homo sapiens

<400> 993  
 ngcgcgcgcg gcaccacata cgacgacggg acgttattca cctctaacgt gtagccgcg  
 60  
 tcgcggtccg gatccgcgat gatggccgcg tggcctgaag caatggggta ggtgcccg  
 120

atgcgtcgcct ttggcgcacg aggttttacgc cgtgggggagt tcataaggga aataccagca  
 180  
 cagggtcggga ccagttgtta cgatcgctgc atgatctact tgtcgcagga ttatatcggg  
 240  
 gagctaccca agcaacatat ctcgctggga aagtttgatc ccgacaatat tcctgcggac  
 300  
 ccgaacgaac tgtttgccac gtggtttaaa gaagccgttg agaacgaagt cggcgaccct  
 360  
 actgcggta cctgggccac ggtggacgac aacggtcagc ccgatgcgcg agtcgtcgac  
 420  
 cttctgtacc tcaactccga cggcttccac  
 450

<210> 994

<211> 110

<212> PRT

<213> Homo sapiens

<400> 994

Met	Arg	Arg	Phe	Gly	Ala	Arg	Gly	Leu	Arg	Arg	Gly	Glu	Phe	Ile	Arg
1				5				10					15		
Glu	Ile	Pro	Ala	Gln	Gly	Arg	Thr	Ser	Cys	Tyr	Asp	Arg	Cys	Met	Ile
			20					25				30			
Tyr	Leu	Ser	Gln	Asp	Tyr	Ile	Gly	Glu	Leu	Pro	Lys	Gln	His	Ile	Ser
		35				40						45			
Leu	Gly	Lys	Phe	Asp	Pro	Asp	Asn	Ile	Pro	Ala	Asp	Pro	Asn	Glu	Leu
	50					55					60				
Phe	Ala	Thr	Trp	Phe	Lys	Glu	Ala	Val	Glu	Asn	Glu	Val	Gly	Asp	Pro
65				70					75					80	
Thr	Ala	Val	Thr	Val	Ala	Thr	Val	Asp	Asp	Asn	Gly	Gln	Pro	Asp	Ala
			85					90						95	
Arg	Val	Val	Asp	Leu	Leu	Tyr	Leu	Asn	Ser	Asp	Gly	Phe	His		
			100					105					110		

<210> 995

<211> 924

<212> DNA

<213> Homo sapiens

<400> 995

cgggagctgg tggaccagga cgtgcagcct gcccgctacc acatcgcctt tgggcccggtg  
 60  
 gtggatggcg acgtgggtccc cgatgaccct gagatcctca tgcagcaggg agaattcctc  
 120  
 aactacgaca tgctcatcgg cgtcaaccag ggagagggcc tcaagttcgt ggaggactct  
 180  
 gcagagagcg aggacgggtgt gtctgccagc gcctttgact tcaactgtctc caacttttgtg  
 240  
 gacaacctgt atggctaccc ggaaggcaag gatgtgcttc gggagaccat caagtttatg  
 300  
 tacacagact gggccgaccg ggacaatggc gaaatgcgcc gcaaaaccct gctggcgctc  
 360  
 ttactgacc accaatgggt ggcaccagct gtggccactg ccaagctgca cgccgactac  
 420

cagtctcccg tctactttta caccttctac caccactgcc aggcggaggg ccggcctgag  
 480  
 tgggcagatg cggcgcacgg ggatgaactg ccctatgtct ttggcgtgcc catggtgggt  
 540  
 gccaccgacc tcttcccctg taacttctcc aagaatgacg tcatgctcag tgccgtggtc  
 600  
 atgacctact ggaccaactt cgccaagact ggggacccca accagccggt gccgcaggat  
 660  
 accaagttca tccacaccaa gccaatcgc ttcgaggagg tgggtgtggag caaattcaac  
 720  
 agcaaggaga agcagtatct gcacataggg ctgaagccac gcgtgcgtga caactaccgc  
 780  
 gccacaagg tggccttctg gctggagctc gtgccccacc tgcacaacct gcacacggag  
 840  
 ctcttcacca ccaccacgcg cctgcctccc taogccacgc gctggccgcc tcgtcccccc  
 900  
 gctggcgccc cgggcacacg ccgg  
 924

<210> 996

<211> 308

<212> PRT

<213> Homo sapiens

<400> 996

Arg	Glu	Leu	Val	Asp	Gln	Asp	Val	Gln	Pro	Ala	Arg	Tyr	His	Ile	Ala
1				5				10						15	
Phe	Gly	Pro	Val	Asp	Gly	Asp	Val	Val	Pro	Asp	Asp	Pro	Glu	Ile	
			20					25					30		
Leu	Met	Gln	Gly	Glu	Phe	Leu	Asn	Tyr	Asp	Met	Leu	Ile	Gly	Val	
			35				40					45			
Asn	Gln	Gly	Glu	Gly	Leu	Lys	Phe	Val	Glu	Asp	Ser	Ala	Glu	Ser	Glu
			50				55				60				
Asp	Gly	Val	Ser	Ala	Ser	Ala	Phe	Asp	Phe	Thr	Val	Ser	Asn	Phe	Val
65					70					75					80
Asp	Asn	Leu	Tyr	Gly	Tyr	Pro	Glu	Gly	Lys	Asp	Val	Leu	Arg	Glu	Thr
			85						90					95	
Ile	Lys	Phe	Met	Tyr	Thr	Asp	Trp	Ala	Asp	Arg	Asp	Asn	Gly	Glu	Met
			100					105					110		
Arg	Arg	Lys	Thr	Leu	Leu	Ala	Leu	Phe	Thr	Asp	His	Gln	Trp	Val	Ala
			115				120					125			
Pro	Ala	Val	Ala	Thr	Ala	Lys	Leu	His	Ala	Asp	Tyr	Gln	Ser	Pro	Val
			130				135					140			
Tyr	Phe	Tyr	Thr	Phe	Tyr	His	His	Cys	Gln	Ala	Glu	Gly	Arg	Pro	Glu
145					150					155					160
Trp	Ala	Asp	Ala	Ala	His	Gly	Asp	Glu	Leu	Pro	Tyr	Val	Phe	Gly	Val
			165						170					175	
Pro	Met	Val	Gly	Ala	Thr	Asp	Leu	Phe	Pro	Cys	Asn	Phe	Ser	Lys	Asn
			180					185					190		
Asp	Val	Met	Leu	Ser	Ala	Val	Val	Met	Thr	Tyr	Trp	Thr	Asn	Phe	Ala
			195				200					205			
Lys	Thr	Gly	Asp	Pro	Asn	Gln	Pro	Val	Pro	Gln	Asp	Thr	Lys	Phe	Ile
			210			215					220				
His	Thr	Lys	Pro	Asn	Arg	Phe	Glu	Glu	Val	Val	Trp	Ser	Lys	Phe	Asn



```

225                230                235                240
Ser Lys Glu Lys Gln Tyr Leu His Ile Gly Leu Lys Pro Arg Val Arg
                245                250                255
Asp Asn Tyr Arg Ala Asn Lys Val Ala Phe Trp Leu Glu Leu Val Pro
                260                265                270
His Leu His Asn Leu His Thr Glu Leu Phe Thr Thr Thr Thr Arg Leu
                275                280                285
Pro Pro Tyr Ala Thr Arg Trp Pro Pro Arg Pro Pro Ala Gly Ala Pro
                290                295                300
Gly Thr Arg Arg
305

```

<210> 997

<211> 320

<212> DNA

<213> Homo sapiens

<400> 997

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aaattttaata ccatagcctt ctcttggttg atccttctag gcatgagtta tggcattaata
60
acgggcatcc atcttggtgt cgatatcgta cttaatgccg tgcctaaacg agtatcaaga
120
gccttgctctt tggtcgggtgc ctttgccgct attatgtacg gtctcattct acttgattct
180
acctggttag ccttactcgg tatcgatgta cgaggtggtg ccatcgaata ttgggcgaag
240
atgttcaaaa taggtattgg tactgaagag cttcggtacc ctatctttat gcaagatatg
300
tttgatttgc gcccacgcgt
320

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<210> 998

<211> 106

<212> PRT

<213> Homo sapiens

<400> 998

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Lys Phe Asn Thr Ile Ala Phe Ser Trp Leu Ile Leu Leu Gly Met Ser
  1                5                10                15
Tyr Gly Ile Lys Thr Gly Ile His Leu Gly Val Asp Ile Val Leu Asn
                20                25                30
Ala Val Pro Lys Arg Val Ser Arg Ala Leu Ser Leu Phe Gly Ala Phe
                35                40                45
Ala Ala Ile Met Tyr Gly Leu Ile Leu Leu Asp Ser Thr Trp Leu Ala
                50                55                60
Leu Leu Gly Ile Asp Val Arg Gly Gly Ala Ile Glu Tyr Trp Ala Lys
65                70                75                80
Met Phe Lys Ile Gly Ile Gly Thr Glu Glu Leu Arg Tyr Pro Ile Phe
                85                90                95
Met Gln Asp Met Phe Asp Leu Arg Pro Arg
                100                105

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<210> 999

<211> 401

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 999

acgcgttcag gcggttaaca atcgcgctaa gaagctgacc aaggaaaatg tcggcatggg  
 60  
 acatctgagc aagagcttca tcggtgttta tctctactca gaaggcaagt ttgtgaccag  
 120  
 caactatctc aatcgtggct acaaggacat tctgagctat gcagacgatg ctagtctttt  
 180  
 gcaaaagcct ccagcagtgg cttcagatga tctggataca ggtctcttga agagggcctt  
 240  
 ggatgagtgg gtggctgatg ctaagaacca cattctcaat actgaaaact tctttagcgg  
 300  
 gtcaaccggg ctcaacattg acagtttcta cgtcttttgg gaccaagaca tctgctggca  
 360  
 gttggcagct attctgaagc agagcatgaa tcgggaattg t  
 401

&lt;210&gt; 1000

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1000

Met	Val	His	Leu	Ser	Lys	Ser	Phe	Ile	Gly	Val	Tyr	Leu	Tyr	Ser	Glu
1				5					10					15	
Gly	Lys	Phe	Val	Thr	Ser	Asn	Tyr	Leu	Asn	Arg	Gly	Tyr	Lys	Asp	Ile
			20					25					30		
Leu	Ser	Tyr	Ala	Asp	Asp	Ala	Ser	Leu	Leu	Gln	Lys	Pro	Pro	Ala	Val
		35				40					45				
Ala	Ser	Asp	Asp	Leu	Asp	Thr	Gly	Leu	Leu	Lys	Arg	Ala	Leu	Asp	Glu
	50				55					60					
Trp	Val	Ala	Asp	Ala	Lys	Asn	His	Ile	Leu	Asn	Thr	Glu	Asn	Phe	Phe
65				70					75					80	
Ser	Gly	Ser	Thr	Gly	Leu	Asn	Ile	Asp	Ser	Phe	Tyr	Val	Phe	Gly	Asp
			85			90							95		
Gln	Asp	Ile	Cys	Trp	Gln	Leu	Ala	Ala	Ile	Leu	Lys	Gln	Ser	Met	Asn
		100				105							110		
Arg	Glu	Leu													
		115													

&lt;210&gt; 1001

&lt;211&gt; 351

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1001

cgcggtattg caatgcgcct ggtgccgaat gctaaacctg ctcttgattg cccggtactg  
 60  
 ttcccttatg cccctaattgc ggtgattgtt ggcttcctgg ccactaccgt tggttcaatt  
 120  
 atcggtatga ttgtcttccc gctgttttgg ctggcgatga tccttccggg tctgctaaact  
 180

aacttcttcg ctggtggtgc cgctggagtc tttggcaacg cgatgggagg acgtaaaggg  
 240  
 gcaattattg gcggcgtagt gcacgggctg tttatcaccc tgttaccagc gatgctaata  
 300  
 cccttactgg aaaccttcgg cttcaaaggc gtcaccttca gtgattccga t  
 351

<210> 1002

<211> 117

<212> PRT

<213> Homo sapiens

<400> 1002

Arg	Gly	Ile	Ala	Met	Arg	Leu	Val	Pro	Asn	Ala	Lys	Pro	Ala	Leu	Asp
1				5					10					15	
Cys	Pro	Val	Leu	Phe	Pro	Tyr	Ala	Pro	Asn	Ala	Val	Ile	Val	Gly	Phe
			20					25					30		
Leu	Ala	Thr	Thr	Val	Gly	Ser	Ile	Ile	Gly	Met	Ile	Val	Phe	Pro	Leu
		35				40						45			
Phe	Gly	Leu	Ala	Met	Ile	Leu	Pro	Gly	Leu	Leu	Thr	Asn	Phe	Phe	Ala
	50				55						60				
Gly	Gly	Ala	Ala	Gly	Val	Phe	Gly	Asn	Ala	Met	Gly	Gly	Arg	Lys	Gly
65				70				75						80	
Ala	Ile	Ile	Gly	Gly	Val	Val	His	Gly	Leu	Phe	Ile	Thr	Leu	Leu	Pro
			85					90					95		
Ala	Met	Leu	Ile	Pro	Leu	Leu	Glu	Thr	Phe	Gly	Phe	Lys	Gly	Val	Thr
			100					105					110		
Phe	Ser	Asp	Ser	Asp											
			115												

<210> 1003

<211> 444

<212> DNA

<213> Homo sapiens

<400> 1003

acgcgtcctc ctttagtcga tcgcgaatat gataggcgaa gcgacgtgat ggtgtgacgc  
 60  
 acgagcactg ccccatctcc taggcttagg gttatgcaga ctcccatcga cgctacctcc  
 120  
 acccccgcacat ggggcacact ctccggccta aagtcccgct tcgctgacgg gccacataaa  
 180  
 ctgcgccgtt tgttcgacgc cgaccctcac cgcgctgagc gctacacctt tgacgtcgcg  
 240  
 gatttgcacg tcgatttata gaagaacctc cttaccgacg agattcgatga cgctctcttc  
 300  
 gaactggctg cgcagatgcg cgtcaccgag cgtcgtgacg cgatgtatgc cggtagcac  
 360  
 atcaacgtca ccgaggaccg cgccgtcctc cataccgcgc tgtgtcgctcc ccgcactgac  
 420  
 gagctgcatg ttgacgggtca ggat  
 444

<210> 1004

<211> 117  
 <212> PRT  
 <213> Homo sapiens

<400> 1004

```

Met Gln Thr Pro Ile Asp Ala Thr Ser Thr Pro Ala Trp Gly Thr Leu
 1           5           10           15
Ser Gly Leu Lys Ser Arg Phe Ala Asp Gly Pro His Lys Leu Arg Arg
      20           25           30
Leu Phe Asp Ala Asp Pro His Arg Ala Glu Arg Tyr Thr Phe Asp Val
      35           40           45
Ala Asp Leu His Val Asp Leu Ser Lys Asn Leu Leu Thr Asp Glu Ile
      50           55           60
Arg Asp Ala Leu Leu Glu Leu Ala Ala Gln Met Arg Val Thr Glu Arg
65           70           75           80
Arg Asp Ala Met Tyr Ala Gly Glu His Ile Asn Val Thr Glu Asp Arg
      85           90           95
Ala Val Leu His Thr Ala Leu Cys Arg Pro Arg Thr Asp Glu Leu His
      100          105          110
Val Asp Gly Gln Asp
      115

```

<210> 1005  
 <211> 299  
 <212> DNA  
 <213> Homo sapiens

<400> 1005

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ccatggccat tcctctggtg actgcatcca gtccgatgga tttaaaccacc cccaatgtgc
60
tggtgactcc caagtttaca cctccagcca gggcttctct cctggggttg catacccacc
120
tatctatctg ccttagccac tcgtgtctga cgagcacctc acacctccag aggctcctca
180
tttcttccca tgctgtcttc tcccacactc ctccctctca catgagggca acttcctcct
240
cccagttgct caggcccca acctccatca gttttgactc ttctctcgca cactactcg
299

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<210> 1006  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

<400> 1006

```

Met Ala Ile Pro Leu Val Thr Ala Ser Ser Pro Met Asp Leu Asn Thr
 1           5           10           15
Pro Asn Val Leu Val Thr Pro Lys Phe Thr Pro Pro Ala Arg Ala Ser
      20           25           30
Leu Leu Gly Leu His Thr His Leu Ser Ile Cys Leu Ser His Ser Cys
      35           40           45
Leu Thr Ser Thr Ser His Leu Gln Arg Leu Leu Ile Ser Ser His Ala
      50           55           60
Cys Phe Ser His Thr Pro Pro Ser His Met Arg Ala Thr Ser Ser Ser

```

973

ngccttcacg gctgntatgc ctggcctcat ccccatccct ggcacccgtg acgatagcca  
 60  
 cattccactg gtgtttcccc aggaaagcca accctacctg catctcagca gagcttccac  
 120  
 ggagttggaa ccccgctccg agaggggtgtg ggctcagggg ccaggggtca cacaaactcc  
 180  
 agaaggagga cgtagttggt ttgcaaggct gtcctttgcc ctggttgaat aaccttcggt  
 240  
 ctgccccgag aggaacgtgg gcattaggct gcacccgcag gaagccatgt attttctgag  
 300  
 aaacttgccc catggtgcag atct  
 324

<210> 1010

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1010

Met	Gly	Gln	Val	Ser	Gln	Lys	Ile	His	Gly	Phe	Leu	Arg	Val	Gln	Pro
1				5					10					15	
Asn	Ala	His	Val	Pro	Leu	Gly	Ala	Asp	Arg	Arg	Leu	Phe	Asn	Gln	Gly
			20					25					30		
Lys	Gly	Gln	Pro	Cys	Lys	Pro	Thr	Thr	Ser	Ser	Phe	Trp	Ser	Leu	Cys
		35					40					45			
Asp	Pro	Trp	Pro	Leu	Ser	Pro	His	Pro	Leu	Gly	Ala	Gly	Phe	Gln	Leu
	50					55				60					
Arg	Gly	Ser	Ser	Ala	Glu	Met	Gln	Val	Gly	Leu	Ala	Phe	Leu	Gly	Lys
65					70				75					80	
His	Gln	Trp	Asn	Val	Ala	Ile	Val	Thr	Gly	Ala	Arg	Asp	Gly	Asp	Glu
			85					90					95		
Ala	Arg	His	Xaa	Ser	His	Glu	Gly								
						100									

<210> 1011

<211> 330

<212> DNA

<213> Homo sapiens

<400> 1011

ctgcagaaaa ggagggggtt cccatgccaa ggcagaactg tctgggacag acgctgcccg  
 60  
 gatecctgcg gctgectgca ctctggacca cgagctctga gagcagcagg ttgagggccg  
 120  
 gtgggcagca gctcggaggg tccgcgaggt gcaggagacg caggcatggc cggtagagctg  
 180  
 actcctgagg aggaggecca gtacaaaaag gctttctccg cggttgacac ggatggaaac  
 240  
 ggcaccatca atgccagga gctgggcgcg gcgctgaagg ccacgggcaa gaacctctcg  
 300  
 gaggeccagc taaagaaact catctccgag  
 330

<210> 1012

<211> 55  
 <212> PRT  
 <213> Homo sapiens

<400> 1012  
 Met Ala Gly Glu Leu Thr Pro Glu Glu Glu Ala Gln Tyr Lys Lys Ala  
 1 5 10 15  
 Phe Ser Ala Val Asp Thr Asp Gly Asn Gly Thr Ile Asn Ala Gln Glu  
 20 25 30  
 Leu Gly Ala Ala Leu Lys Ala Thr Gly Lys Asn Leu Ser Glu Ala Gln  
 35 40 45  
 Leu Lys Lys Leu Ile Ser Glu  
 50 55

<210> 1013  
 <211> 432  
 <212> DNA  
 <213> Homo sapiens

<400> 1013  
 nacttgacaca tcgtggtggc gtcgctgcgt gcggcactga caatgtgact ggcgcatctcg  
 60  
 tggcggcgctc tcctcgtcgc cgggagcggc gaggaaggat taacgatgac cagcgacgctc  
 120  
 cccgggattg gctcgaacgc cgccactttg gcgcgttccc aggctcgcag tgacaaggctc  
 180  
 gaggctgatt tggcgggtcca tcccagacaag tggcgcattc tgggggggga ccgtcctact  
 240  
 ggcagcctgc acatcgggtca ctacttcggg tcgctggcga atcgggtacg cgtgcagaac  
 300  
 aagggcattg agtcttttct tgctcgtcgt gactaccagg ttatctatga ccgcggggggg  
 360  
 ggtggtgacc tgcaggccaa tgttatgtcg aatgtcgccg attacctggc aatcggcatt  
 420  
 gacccaacgc gt  
 432

<210> 1014  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 1014  
 Met Thr Ser Asp Val Pro Gly Ile Gly Ser Asn Ala Ala Thr Leu Ala  
 1 5 10 15  
 Arg Ser Gln Ala Arg Ser Asp Lys Val Glu Ala Asp Leu Ala Val His  
 20 25 30  
 Pro Asp Lys Trp Arg Ile Leu Gly Gly Asp Arg Pro Thr Gly Ser Leu  
 35 40 45  
 His Ile Gly His Tyr Phe Gly Ser Leu Ala Asn Arg Val Arg Val Gln  
 50 55 60  
 Asn Lys Gly Ile Glu Ser Phe Leu Val Val Ala Asp Tyr Gln Val Ile  
 65 70 75 80  
 Tyr Asp Arg Gly Gly Gly Gly Asp Leu Gln Ala Asn Val Met Ser Asn

	85		90		95							
Val	Ala	Asp	Tyr	Leu	Ala	Ile	Gly	Ile	Asp	Pro	Thr	Arg
	100						105					

<210> 1015  
 <211> 467  
 <212> DNA  
 <213> Homo sapiens

<400> 1015  
 nngaattcga tggctgtgaa aggtcgagct cttaagtgtt ttcatatccc ctgtgtgggtt  
 60  
 gaaaacttcc cgatgaaagc gcgcacgggt gaagagctga aagaattgga aagagtttta  
 120  
 cagcaaaaga agattgaagc agagtgtctt aaactacgga aggaaattgt agaggctcag  
 180  
 tctggagtta agttgattaa acagcgtcat gaagaggatg atgaagaaga ggaagaggaa  
 240  
 gacaagacag taaaatatag caatttgccc aattacctgc ttggtagtct gactactgat  
 300  
 tttggggtag atacctcttt attgtcaagc caattggagc ttcattccag agaagagaaa  
 360  
 atcaaccaaa ttatattatt gaaagatatc atttacaagg taaaaactgt tttcaataat  
 420  
 gagtttgacg ctgcatataa acaaaaagag tttgaaattg cacgcgt  
 467

<210> 1016  
 <211> 155  
 <212> PRT  
 <213> Homo sapiens

<400> 1016  
 Xaa Asn Ser Met Ala Val Lys Gly Arg Ala Leu Lys Cys Phe His Ile  
 1 5 10 15  
 Pro Cys Val Val Glu Asn Phe Pro Met Lys Ala Arg Thr Val Glu Glu  
 20 25 30  
 Leu Lys Glu Leu Glu Arg Val Leu Gln Gln Lys Lys Ile Glu Ala Glu  
 35 40 45  
 Cys Leu Lys Leu Arg Lys Glu Ile Val Glu Ala Gln Ser Gly Val Lys  
 50 55 60  
 Leu Ile Lys Gln Arg His Glu Glu Asp Asp Glu Glu Glu Glu Glu Glu  
 65 70 75 80  
 Asp Lys Thr Val Lys Tyr Ser Asn Leu Pro Asn Tyr Leu Leu Gly Ser  
 85 90 95  
 Leu Ser Thr Asp Phe Gly Val Asp Thr Ser Leu Leu Ser Ser Gln Leu  
 100 105 110  
 Glu Leu His Ser Arg Glu Glu Lys Ile Asn Gln Ile Ile Leu Leu Lys  
 115 120 125  
 Asp Ile Ile Tyr Lys Val Lys Thr Val Phe Asn Asn Glu Phe Asp Ala  
 130 135 140  
 Ala Tyr Lys Gln Lys Glu Phe Glu Ile Ala Arg  
 145 150 155



<210> 1017  
 <211> 335  
 <212> DNA  
 <213> Homo sapiens

<400> 1017  
 acgcgtggct gggtgggtat gtggaaccat gtgcgcgcta atgagaagga tgcgaagggg  
 60  
 aacattaaag tgggtcgccc cggtactttt gccgaggtca tggatttcta tgcgcattat  
 120  
 ctgaaggggtg cgggttaccg tttccgtccg aattttattg tgcaggataa tacggggccgt  
 180  
 tggcgtgttc agtcgtcgtg gccgcagccg aatcgcactg ttacttttgc gggaccccg  
 240  
 ggcattgtcc gctacgggtac gacgttggcg gcccgcacgc atgggaatgg tcaggctatt  
 300  
 ccgcaggcgg atgcacagtc tcttaaccgc gagaa  
 335

<210> 1018  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 1018  
 Met Trp Asn His Val Arg Ala Asn Glu Lys Asp Ala Lys Gly Asn Ile  
 1 5 10 15  
 Lys Val Gly Arg Pro Gly Tyr Phe Ala Glu Val Met Asp Phe Tyr Ala  
 20 25 30  
 His Tyr Leu Lys Gly Ala Val Thr Arg Phe Arg Pro Asn Phe Ile Val  
 35 40 45  
 Gln Asp Asn Thr Gly Arg Trp Arg Val Gln Ser Ser Trp Pro Gln Pro  
 50 55 60  
 Asn Arg Thr Val Thr Phe Ala Gly Pro Arg Gly Ile Val Arg Tyr Gly  
 65 70 75 80  
 Thr Thr Leu Ala Ala Arg Thr His Gly Asn Gly Gln Ala Ile Pro Gln  
 85 90 95  
 Ala Asp Ala Gln Ser Leu Asn Arg Glu  
 100 105

<210> 1019  
 <211> 454  
 <212> DNA  
 <213> Homo sapiens

<400> 1019  
 acgcgtgaag gggtagtcgt agtagaagtc gtccacaaac acgggccccg gcagggtccag  
 60  
 ctctggagcc tctctctcaa tggcgttgcc catgggtgctt ggcttggggtg atgaggcggg  
 120  
 tgaagggcgt ggggccaggt ggtgcgggat gaagtcagcc tcgttgaaga gctcgtggct  
 180  
 ggaggagccg ctgcctgagc cttcagggcc cagtgtgccc agggggccacc gacagagtgg  
 240

cagagagcag gtgacttcct ggcactgcgg agcgaggacc cggagaagta cttcctcaat  
 300  
 ggtggctgga ccatccagtg gaacggggac taccaggtgg cagggaccac cttcacatac  
 360  
 gcacgcaggg gcaactggga gaacctcacg tccccgggtc ccaccaagga gcctgtctgg  
 420  
 atccagctgc tgttccagga gagcaaccct gggg  
 454

<210> 1020  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<400> 1020  
 Met Ala Leu Pro Met Val Pro Gly Leu Gly Asp Glu Ala Gly Glu Gly  
 1 5 10 15  
 Arg Gly Ala Arg Trp Cys Gly Met Lys Ser Ala Ser Leu Lys Ser Ser  
 20 25 30  
 Trp Leu Glu Glu Pro Leu Pro Glu Pro Ser Gly Pro Ser Val Pro Arg  
 35 40 45  
 Gly His Arg Gln Ser Gly Arg Glu Gln Val Thr Ser Trp His Cys Gly  
 50 55 60  
 Ala Arg Thr Arg Arg Ser Thr Ser Ser Met Val Ala Gly Pro Ser Ser  
 65 70 75 80  
 Gly Thr Gly Thr Thr Arg Trp Gln Gly Pro Pro Ser His Thr His Ala  
 85 90 95  
 Gly Ala Thr Gly Arg Thr Ser Arg Pro Arg Val Pro Pro Arg Ser Leu  
 100 105 110  
 Ser Gly Ser Ser Cys Cys Ser Arg Arg Ala Thr Leu Gly  
 115 120 125

<210> 1021  
 <211> 366  
 <212> DNA  
 <213> Homo sapiens

<400> 1021  
 cagctgtgtc gtgacctcct gtagaccaga gagaggtaga gcatgaaaa tgctcattga  
 60  
 gccgagatta tctgacagga ccaaagcata taaagttgac tgaagcagga gcaaacacgc  
 120  
 tgggttgaggg tcaagtgtcg gggcagcagc aacaacaaac caaaaaaag ccctttgaac  
 180  
 tcccttaatg ttgccccaaag gttctggtag agaacaagtc acatgcctaa gaaggtcttt  
 240  
 taaagggcac tcttgagtt tcagcatttg gtccggggaa ttgcacaagg ctctgcttaa  
 300  
 atgcagagct ctttctagca tcttcatatt caaggcggaa aaactgagct tggcgaggaa  
 360  
 ccctgt  
 366

<210> 1022

<211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 1022  
 Met Lys Met Leu Glu Arg Ala Leu His Leu Ser Arg Ala Leu Cys Asn  
 1 5 10 15  
 Ser Pro Asp Gln Met Leu Lys Leu Gln Glu Cys Pro Leu Lys Asp Leu  
 20 25 30  
 Leu Arg His Val Thr Cys Ser Leu Pro Glu Pro Leu Gly Asn Ile Lys  
 35 40 45  
 Gly Val Gln Arg Ala Phe Phe Trp Phe Val Val Ala Ala Ala Pro Ala  
 50 55 60  
 Leu Asp Pro Gln Pro Ala Cys Leu Leu Leu Leu Gln Ser Thr Leu Tyr  
 65 70 75 80  
 Ala Leu Val Leu Ser Asp Asn Leu Gly Ser Met Ser Ile Phe His Ala  
 85 90 95  
 Leu Pro Leu Ser Gly Leu Gln Glu Val Thr Thr Gln Leu  
 100 105

<210> 1023  
 <211> 426  
 <212> DNA  
 <213> Homo sapiens

<400> 1023  
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 60  
 ggcatactga ccatacagca gaccaagttt ggcaagtccc gcatgggtgcc gctacacccc  
 120  
 agcgtgatcg gtccgatggc agcctaccgg gccttgcgcc gccagtacgt gcoctgcgaag  
 180  
 ccgcagatga cattcttcgt gggctcgcgt ggcgtgcacc ggggtgaacc gctgggagat  
 240  
 aggcaggtgc atcgagtgtt ctgtcagctg cgcgagcaat tgggttggat cgatcgcggc  
 300  
 ggccatggcc gaccgcggtt gcatgacctg cgccatagct tcgccgtgag acggatgac  
 360  
 ctgtggcacc agcagggagc gaaccttgac caacgaatgc tggccctgtc cacgtacatg  
 420  
 ggccac  
 426

<210> 1024  
 <211> 142  
 <212> PRT  
 <213> Homo sapiens

<400> 1024  
 Ala Gly Leu Arg Val Ser Glu Ala Ile Asn Leu Ala Asp Ser Asp Ala  
 1 5 10 15  
 Asp Leu Asp Gly Gly Ile Leu Thr Ile Gln Gln Thr Lys Phe Gly Lys  
 20 25 30  
 Ser Arg Met Val Pro Leu His Pro Ser Val Ile Gly Pro Met Ala Ala

```

          35              40              45
Tyr Arg Ala Leu Arg Arg Gln Tyr Val Pro Ala Lys Pro Gln Met Thr
   50              55              60
Phe Phe Val Gly Ser Arg Gly Val His Arg Gly Glu Pro Leu Gly Asp
65              70              75              80
Arg Gln Val His Arg Val Phe Cys Gln Leu Arg Glu Gln Leu Gly Trp
          85              90              95
Ile Asp Arg Gly Gly His Gly Arg Pro Arg Val His Asp Leu Arg His
          100              105              110
Ser Phe Ala Val Arg Arg Met Ile Leu Trp His Gln Gln Gly Ala Asn
          115              120              125
Leu Asp Gln Arg Met Leu Ala Leu Ser Thr Tyr Met Gly His
          130              135              140

```

<210> 1025  
 <211> 518  
 <212> DNA  
 <213> Homo sapiens

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<400> 1025
nacgcgtggt ggcgcaggt ggcgccgcgg tccctttgct ccctgcgcaa gccggagggg
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tgcccagaag gctaccacta gcctcagcga aggggtgcgc ctgagagccg ggtagcctcg
120
gatagcggcg ctgcgtacgc gatgatggat gagccgtggt ggggaagggcg cgtcgcctcg
180
gacgtccact gcacctgcg cgagaaggaa ctgaagctgc ccaccttcg agccactcc
240
ccactcctga agagccgcg gttcttcgtg gacatcctga cctgctgag cagccactgc
300
cagctctgcc ctgcagcccg gcacctggcc gtctacctgc tggaccactt catggatcgc
360
tacaacgtca ccacctcaa gcagctctac accgtggccg tctcctgcct cctgcttgca
420
agtaagttcg aggatcgga agaccacgtc cccaagttgg agcaaataaa cagcagcagg
480
atcctgagca gccagaactt caccctcacc aagaagga
518

```

<210> 1026  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1026
Met Met Asp Glu Pro Trp Trp Glu Gly Arg Val Ala Ser Asp Val His
  1              5              10              15
Cys Thr Leu Arg Glu Lys Glu Leu Lys Leu Pro Thr Phe Arg Ala His
          20              25              30
Ser Pro Leu Leu Lys Ser Arg Arg Phe Phe Val Asp Ile Leu Thr Leu
          35              40              45
Leu Ser Ser His Cys Gln Leu Cys Pro Ala Ala Arg His Leu Ala Val
          50              55              60
Tyr Leu Leu Asp His Phe Met Asp Arg Tyr Asn Val Thr Thr Ser Lys

```

```

65          70          75          80
Gln Leu Tyr Thr Val Ala Val Ser Cys Leu Leu Leu Ala Ser Lys Phe
          85          90          95
Glu Asp Arg Glu Asp His Val Pro Lys Leu Glu Gln Ile Asn Ser Thr
          100          105          110
Arg Ile Leu Ser Ser Gln Asn Phe Thr Leu Thr Lys Lys
          115          120          125

```

<210> 1027

<211> 465

<212> DNA

<213> Homo sapiens

<400> 1027

```

ggcccaaaag tcatcaaaga aaagctgaca caggagctga aggaccacaa cgccaccagc
60
atcctgcagc agctgccgct gctcaaggcc atgcgggaaa agccagccgg aggcacccct
120
gtgctgggca gcttgggtgaa caccngtcct gaagcacatc atnntggct gaaggtcatc
180
acagctaaca tcctccagct gcaggtgaag cctcgggcca atgaccagga gctgctagtc
240
aagatcccc tggacatggg ggctggattc aacacgcccc tggtaagac catcgtggag
300
ttccacatga cgactgaggc ccaagccacc atccgcatgg acaccagtgc aagtggcccc
360
accgcctgg tcctcagtga ctgtgccacc agccatggga gcttgcgcat ccaactgctg
420
cataagctct ccttcaagct gaacgcctca gctaagcagg tcatg
465

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<210> 1028

<211> 155

<212> PRT

<213> Homo sapiens

<400> 1028

```

Gly Pro Lys Val Ile Lys Glu Lys Leu Thr Gln Glu Leu Lys Asp His
1          5          10          15
Asn Ala Thr Ser Ile Leu Gln Gln Leu Pro Leu Leu Lys Ala Met Arg
          20          25          30
Glu Lys Pro Ala Gly Gly Ile Pro Val Leu Gly Ser Leu Val Asn Thr
          35          40          45
Xaa Pro Glu Ala His His Xaa Trp Leu Lys Val Ile Thr Ala Asn Ile
          50          55          60
Leu Gln Leu Gln Val Lys Pro Ser Ala Asn Asp Gln Glu Leu Leu Val
65          70          75          80
Lys Ile Pro Leu Asp Met Val Ala Gly Phe Asn Thr Pro Leu Val Lys
          85          90          95
Thr Ile Val Glu Phe His Met Thr Thr Glu Ala Gln Ala Thr Ile Arg
          100          105          110
Met Asp Thr Ser Ala Ser Gly Pro Thr Arg Leu Val Leu Ser Asp Cys
          115          120          125
Ala Thr Ser His Gly Ser Leu Arg Ile Gln Leu Leu His Lys Leu Ser

```

130 135 140  
Phe Lys Leu Asn Ala Ser Ala Lys Gln Val Met  
145 150 155

<210> 1029  
<211> 479  
<212> DNA  
<213> Homo sapiens

<400> 1029  
acgcgtgaag ggaaactgtc ctcacagatg agtgtgaggg ttcaaaaaga tactgcctgc  
60  
caagcactgg ccacaaatgc ctggcagaac aactgctcat aagtgtgtag ttgttgttat  
120  
tattactaac caagtgagga aaattatccc tagcagggtcc agatgaccgt gtgcatgaat  
180  
cacagggaga ccctaaagga tttcctcctg taaagctctt tccccaccta tttgctactg  
240  
cctgaaattg ctttagcagg aacacagaatc tctcatgcca caagtgagca taaagttaa  
300  
aatgtaaattg ctctaggaaa aggcaactca tctcttaaatt tctctccaag gttcaaattcc  
360  
tttccaaaga ggaggctttt gtataagtca gaaggcccag tccctgaagg tcatggaaaa  
420  
ggtcatgaca cacggagggg gtgtcaaagg gagactggga aactgaagat gaagctagc  
479

<210> 1030  
<211> 110  
<212> PRT  
<213> Homo sapiens

<400> 1030  
Met Ser Cys Leu Phe Leu Glu His Leu His Phe Lys Leu Tyr Ala His  
1 5 10 15  
Leu Trp His Glu Arg Phe Cys Phe Leu Leu Lys Gln Phe Gln Ala Val  
20 25 30  
Ala Asn Arg Trp Gly Lys Ser Phe Thr Gly Gly Asn Pro Leu Gly Ser  
35 40 45  
Pro Cys Asp Ser Cys Thr Arg Ser Ser Gly Pro Ala Arg Asp Asn Phe  
50 55 60  
Pro His Leu Val Ser Asn Asn Asn Asn Asn Tyr Thr Leu Met Ser Ser  
65 70 75 80  
Cys Ser Ala Arg His Leu Trp Pro Val Leu Gly Arg Gln Tyr Leu Phe  
85 90 95  
Glu Pro Ser His Ser Ser Val Arg Thr Val Ser Leu His Ala  
100 105 110

<210> 1031  
<211> 322  
<212> DNA  
<213> Homo sapiens

<400> 1031

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 gcagatggct ggtttgaagt ggaggtgaag tgcccggcgg gcaactacta cgcgtataac  
 120  
 atcgacggcg aaaccgatgt acccgacccg gcatccaggg cgcaagccaa cgatgtgcat  
 180  
 ggggtggagcg tcgtcgtcga cccgctcgcc tatcaatggc gacaccctaa ctggcaaggc  
 240  
 cgcccctggc atgaggcggt gatttacgag ctgcacgttg gcgtactggg cgggtacgcc  
 300  
 gctgttgaac agcaactgcc gc  
 322

<210> 1032

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1032

Xaa	Ala	Phe	Tyr	Val	Ser	Val	Glu	Leu	Glu	Asp	Gly	Lys	Ser	Ile	Ala
1				5				10						15	
Met	Leu	Pro	Gln	Ala	Asp	Gly	Trp	Phe	Glu	Val	Glu	Val	Lys	Cys	Pro
			20					25					30		
Ala	Gly	Thr	His	Tyr	Arg	Tyr	Asn	Ile	Asp	Gly	Glu	Thr	Asp	Val	Pro
		35					40					45			
Asp	Pro	Ala	Ser	Arg	Ala	Gln	Ala	Asn	Asp	Val	His	Gly	Trp	Ser	Val
	50					55					60				
Val	Val	Asp	Pro	Leu	Ala	Tyr	Gln	Trp	Arg	His	Pro	Asn	Trp	Gln	Gly
65				70					75					80	
Arg	Pro	Trp	His	Glu	Ala	Val	Ile	Tyr	Glu	Leu	His	Val	Gly	Val	Leu
			85					90						95	
Gly	Gly	Tyr	Ala	Ala	Val	Glu	Gln	Gln	Leu	Pro					
			100					105							

<210> 1033

<211> 579

<212> DNA

<213> Homo sapiens

<400> 1033

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 acagcgccaa ggggtgtgag gagggccctt cgcgggtcac ggataggtcc aagggtggcac  
 120  
 aattcacatt caaatccatc acttttcaca taattgctgt taatatgaac gtcattgagtc  
 180  
 gttgttgctc gcggttgcca gtgggactcc ccatacacgg cagcgagaca tggaggaacc  
 240  
 atgggactaa ggatcgttgt cgccgctgat ccggcggcag tcgagtacaa ggatgtcgtc  
 300  
 aaggctgacc tggaagcgga ttcgcgagtc gatgacgtta tcgacgtcgg cgttcaggct  
 360  
 ggtgacgaca ccctctaccc gcgcatcggc atcaaggag ctcacgtcat caaggacgga  
 420

aaagccgatac gaggaatctt tttctgcggc accgggatgg gcatggccat cacggccaac  
 480  
 aagggtgccag gcattcgcgc ctgcaccgcc cacgactcct tctccgtaga gcgggtcatc  
 540  
 atgtccaacg acgcccacgt gctatgcctc ggccaacgc  
 579

<210> 1034  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 1034  
 Met Gly Leu Arg Ile Val Val Ala Ala Asp Pro Ala Ala Val Glu Tyr  
 1 5 10 15  
 Lys Asp Val Val Lys Ala Asp Leu Glu Ala Asp Ser Arg Val Asp Asp  
 20 25 30  
 Val Ile Asp Val Gly Val Gln Ala Gly Asp Asp Thr Leu Tyr Pro Arg  
 35 40 45  
 Ile Gly Ile Lys Gly Ala His Val Ile Lys Asp Gly Lys Ala Asp Arg  
 50 55 60  
 Gly Ile Phe Phe Cys Gly Thr Gly Met Gly Met Ala Ile Thr Ala Asn  
 65 70 75 80  
 Lys Val Pro Gly Ile Arg Ala Cys Thr Ala His Asp Ser Phe Ser Val  
 85 90 95  
 Glu Arg Leu Ile Met Ser Asn Asp Ala His Val Leu Cys Leu Gly Gln  
 100 105 110  
 Arg

<210> 1035  
 <211> 363  
 <212> DNA  
 <213> Homo sapiens

<400> 1035  
 naccgctgca atgtgtgtgt gtgtatgnga ccatgtctct gtgtgtgtat gngcatatgt  
 60  
 gtgtgtatan gaatgtgtgt atgtgtantg gaatgtgtgt gtgtantgga agctgtgtgc  
 120  
 atatgtnaat gtctgtgtgc atgtacgnga atgtgcgcgt gtatggaatg tatctgtgta  
 180  
 tgtgtatgga ccgtttgtgt gattatgcaa tatgtccgtg tgtgcgtatg gagtgtctca  
 240  
 gtatggcatg tgtgtgtgta tctactgtgc gtctctgtgt gtgtantgac atgcatatgt  
 300  
 atagaaagcg tctgcgctgt gtgcatgtgt gtcagtatcg aacgagtcgg agatgtggta  
 360  
 atn  
 363

<210> 1036  
 <211> 121  
 <212> PRT



<213> Homo sapiens

<400> 1036

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Xaa Ala Cys Asn Val Cys Val Cys Met Xaa Pro Cys Leu Cys Val Cys
 1           5           10           15
Met Xaa Ile Cys Val Cys Ile Xaa Met Cys Val Cys Val Xaa Glu Cys
 20           25           30
Val Cys Val Xaa Glu Ala Val Cys Ile Cys Xaa Cys Leu Cys Ala Cys
 35           40           45
Thr Xaa Met Cys Ala Cys Met Glu Cys Ile Cys Val Cys Val Trp Thr
 50           55           60
Val Cys Val Ile Met Gln Tyr Val Arg Val Cys Val Trp Ser Val Ser
 65           70           75           80
Val Trp His Val Cys Val Tyr Leu Leu Cys Val Ser Val Cys Val Xaa
 85           90           95
Thr Cys Ile Cys Ile Glu Ser Val Cys Ala Val Cys Met Cys Val Ser
 100          105          110
Ile Glu Arg Val Gly Asp Val Val Xaa
 115          120

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<210> 1037

<211> 5832

<212> DNA

<213> Homo sapiens

<400> 1037

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ccttctcctg ggggccagat gcatgctgga atcagtagct ttcagcagag taactcaagt
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gggacttacg gtccacagat gagccagtat ggaccacaag gtaactactc cagaccccca
 120
gcgtatagtg gggtgcccag tgcaagctac agcggcccag ggcccgggtat gggatatcagt
 180
gccacaacc agatgcatgg acaagggcca agccagccat gtggtgctgt gccctggga
 240
cgaatgccat cagctgggat gcagaacaga ccatttctctg gaaatatgag cagcatgacc
 300
cccagttctc ctggcatgtc tcagcagga gggccaggaa tggggccgccc aatgccaaact
 360
gtgaaccgta aggcacagga ggcagccgca gcagtgatgc aggctgctgc gaactcagca
 420
caaagcaggc aaggcagttt ccccgcatg aaccagagtg gacttatggc ttccagctct
 480
ccctacagcc agcccatgaa caacagctct agcctgatga acacgcaggc gccgcctac
 540
agcatggcgc ccgcatggt gaacagctcg gcagcatctg tgggtcttgc agatatgatg
 600
tctctgggtg aatccaaact gccctgcct ctcaaagcag acggcaaaga agaaggcact
 660
ccacagcccc agagcaagtc aaaggatagc tacagctctc aggggtatttc tcagccccc
 720
acccagga acctgccagt ccttccccca atgtccccca gctctgctag catctcctca
 780
tttcatggag atgaaagtga tagcattagc agcccaggct ggccaaagac tccatcaagc
 840

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cctaagtcca gctcctccac cactactggg gagaagatca cgaaggtgta cgagctgggg  
900  
aatgagccag agagaaagct ctgggtcgac cgatacctca cttcatgga agagagaggc  
960  
tctcctgtct caagtctgcc tgccgtgggc aagaagcccc tggacctgtt ccgactctac  
1020  
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1080  
ctggcaacca acctaaacgt tggcacctca agcagtgcag cgagctccct gaaaaagcag  
1140  
tatattcagt acctgtttgc ctttgagtgc aagatcgaac gtggggagga gccccgccc  
1200  
gaagtcttca gcaccgggga caccaaaaag cagcccaagc tccagccgcc atctcctgct  
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1380  
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1620  
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1680  
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1740  
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aagcgccagc agggcgacat gtacaacatg cagtacagca gccagcagca ggagatgtac  
1920  
aaccagtatg gaggtccta ctcgggcccc gaccgcaggc ccatccaggg ccagtaccgg  
1980  
tatccctaca gcagggagag gatgcagggc ccggggcaga tccagacaca cggaatcccc  
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2100  
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2160  
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2220  
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2460

cccacgggtcc ccacatccca ggtcaccggg ccaccacccc aaccaccccc aatcagaagg  
2520  
gagatcacct ttcctcctgg ctcagtagaa gcatcacaac cagtcttgaa acaaaggcga  
2580  
aagattacct ccaaagatat cgttactcct gaggcgtggc gtgtgatgat gtcccttaaa  
2640  
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2700  
gacagcactg ttgctacttt caatctctcc cagttgtctg gatttctcga acttttagtc  
2760  
gagtacttta gaaaatgcct gattgacatt tttggaattc ttatggaata tgaagtggga  
2820  
gaccccagcc aaaaagcact tgatcacaac gcagcaagga aggatgacag ccagtccttg  
2880  
gcagacgatt ctgggaaaga ggaggaagat gctgaatgta ttgatgacga cgaggaagac  
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3000  
ctgactgccc cggacgccgc tgcagacca aaggagaagc ccaagcaagc cagtaagttc  
3060  
gacaagctgc caataaagat agtcaaaaag aacaacctgt ttgttggtga ccgatctgac  
3120  
aagttggggc gtgtgcagga gttcaatagt ggccttctac actggcagct cggcgggggt  
3180  
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3240  
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3300  
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3420  
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3480  
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3540  
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3600  
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3660  
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3720  
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<210> 1038

<211> 1485

<212> PRT

<213> Homo sapiens

<400> 1038

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Gln	Gly	Asn	Tyr	Ser	Arg	Pro	Pro	Ala	Tyr	Ser	Gly	Val	Pro	Ser	Ala
		35				40					45				
Ser	Tyr	Ser	Gly	Pro	Gly	Pro	Gly	Met	Gly	Ile	Ser	Ala	Asn	Asn	Gln
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Met	His	Gly	Gln	Gly	Pro	Ser	Gln	Pro	Cys	Gly	Ala	Val	Pro	Leu	Gly
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Arg	Met	Pro	Ser	Ala	Gly	Met	Gln	Asn	Arg	Pro	Phe	Pro	Gly	Asn	Met
			85				90						95		
Ser	Ser	Met	Thr	Pro	Ser	Ser	Pro	Gly	Met	Ser	Gln	Gln	Gly	Gly	Pro
			100				105						110		
Gly	Met	Gly	Pro	Pro	Met	Pro	Thr	Val	Asn	Arg	Lys	Ala	Gln	Glu	Ala
		115				120						125			
Ala	Ala	Ala	Val	Met	Gln	Ala	Ala	Ala	Asn	Ser	Ala	Gln	Ser	Arg	Gln
		130				135					140				
Gly	Ser	Phe	Pro	Gly	Met	Asn	Gln	Ser	Gly	Leu	Met	Ala	Ser	Ser	Ser
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Pro	Tyr	Ser	Gln	Pro	Met	Asn	Asn	Ser	Ser	Ser	Leu	Met	Asn	Thr	Gln
			165					170					175		
Ala	Pro	Pro	Tyr	Ser	Met	Ala	Pro	Ala	Met	Val	Asn	Ser	Ser	Ala	Ala
			180				185						190		
Ser	Val	Gly	Leu	Ala	Asp	Met	Met	Ser	Pro	Gly	Glu	Ser	Lys	Leu	Pro
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Leu	Pro	Leu	Lys	Ala	Asp	Gly	Lys	Glu	Glu	Gly	Thr	Pro	Gln	Pro	Glu
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Ser	Ile	Ser	Ser	Phe	His	Gly	Asp	Glu	Ser	Asp	Ser	Ile	Ser	Ser	Pro
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Ser	Pro	Val	Ser	Ser	Leu	Pro	Ala	Val	Gly	Lys	Lys	Pro	Leu	Asp	Leu

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Phe	Arg	Leu	Tyr	Val	Cys	Val	Lys	Glu	Ile	Gly	Gly	Leu	Ala	Gln	Val		
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Asn	Lys	Asn	Lys	Lys	Trp	Arg	Glu	Leu	Ala	Thr	Asn	Leu	Asn	Val	Gly		
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Thr	Ser	Ser	Ser	Ala	Ala	Ser	Ser	Leu	Lys	Lys	Gln	Tyr	Ile	Gln	Tyr		
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Glu	Val	Phe	Ser	Thr	Gly	Asp	Thr	Lys	Lys	Gln	Pro	Lys	Leu	Gln	Pro		
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Pro	Thr	Pro	Ala	Ser	Thr	Pro	His	Gly	Gln	Met	Thr	Pro	Met	Gln	Gly		
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Gly	Arg	Ser	Ser	Thr	Ile	Ser	Val	His	Asp	Pro	Phe	Ser	Asp	Val	Ser		
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Gln	Gln	Gly	Met	Ser	Met	Pro	Asp	Val	Met	Gly	Arg	Met	Pro	Tyr	Glu		
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Met	Tyr	Asn	Gln	Ser	Pro	Ser	Gly	Ala	Met	Ser	Asn	Leu	Gly	Met	Gly		
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Gln	Arg	Gln	Gln	Phe	Pro	Tyr	Gly	Ala	Ser	Tyr	Asp	Arg	Arg	His	Glu		
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Pro	Tyr	Gly	Gly	His	Gln	Pro	Gly	Leu	Tyr	Pro	Gln	Gln	Pro	Asn	Tyr		
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Lys	Arg	His	Met	Asp	Gly	Met	Tyr	Gly	Pro	Pro	Ala	Lys	Arg	His	Glu		
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Gly	Gln	Tyr	Pro	Tyr	Pro	Tyr	Ser	Arg	Glu	Arg	Met	Gln	Gly	Pro	Gly		
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Gln	Ile	Gln	Thr	His	Gly	Ile	Pro	Leu	Gln	Met	Met	Gly	Gly	Pro	Leu		
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Gln	Ser	Ser	Ser	Ser	Glu	Gly	Pro	Gln	Gln	Asn	Met	Trp	Ala	Ala	Arg		
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Thr	Gln	Ala	Pro	Pro	Tyr	Pro	Gly	Met	Asn	Arg	Thr	Asp	Asp	Met	Met		
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Val	Pro	Asp	Gln	Arg	Ile	Asn	His	Glu	Ser	Gln	Trp	Pro	Ser	His	Val		
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991

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Met Ser Lys His Pro Gly Leu Val Leu Ile Leu Gly Lys Leu Ile Leu
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Leu His His Glu His Pro Glu Arg Lys Arg Ala Pro Gln Thr Tyr Glu
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Lys Glu Glu Asp Glu Asp Lys Gly Val Ala Cys Ser Lys Asp Glu Trp
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Trp Trp Asp Cys Leu Glu Val Leu Arg Asp Asn Thr Leu Val Thr Leu
          1250          1255          1260
Ala Asn Ile Ser Gly Gln Leu Asp Leu Ser Ala Tyr Thr Glu Ser Ile
1265          1270          1275          1280
Cys Leu Pro Ile Leu Asp Gly Leu Leu His Trp Met Val Cys Pro Ser
          1285          1290          1295
Ala Glu Ala Gln Asp Pro Phe Pro Thr Val Gly Pro Asn Ser Val Pro
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Ser Pro Gln Arg Leu Val Leu Glu Thr Leu Cys Lys Leu Ser Ile Gln
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Asp Asn Asn Val Asp Leu Ile Leu Ala Thr Pro Pro Phe Ser Arg Gln
          1330          1335          1340
Glu Lys Phe Tyr Ala Thr Leu Val Arg Tyr Val Gly Asp Arg Lys Asn
1345          1350          1355          1360
Pro Val Cys Arg Glu Met Ser Met Ala Leu Leu Ser Asn Leu Ala Gln
          1365          1370          1375
Gly Asp Ala Leu Ala Ala Arg Ala Ile Ala Val Gln Lys Gly Ser Ile
          1380          1385          1390
Gly Asn Leu Ile Ser Phe Leu Glu Asp Gly Val Thr Met Ala Gln Tyr
          1395          1400          1405
Gln Gln Ser Gln His Asn Leu Met His Met Gln Pro Pro Pro Leu Glu
          1410          1415          1420
Pro Pro Ser Val Asp Met Met Cys Arg Ala Ala Lys Ala Leu Leu Ala
1425          1430          1435          1440
Met Ala Arg Val Asp Glu Asn Arg Ser Glu Phe Leu Leu His Glu Gly
          1445          1450          1455
Arg Leu Leu Asp Ile Ser Ile Ser Ala Val Leu Asn Ser Leu Val Ala
          1460          1465          1470
Ser Val Ile Cys Asp Val Leu Phe Gln Ile Gly Gln Leu
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&lt;210&gt; 1039

&lt;211&gt; 379

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1039

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cagaggggag agaggggagag agtgtgagag ctaagggttc gggagaagac tttgtggaaa
180
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240
gattttgtat gtattgaagg ccctgaatac ttttttgaaa gagaatgaca tgagtacacc
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 <212> PRT  
 <213> Homo sapiens

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 Phe Gln Lys Ser Ile Gln Gly Leu Gln Tyr Ile Gln Asn Leu Glu Trp  
 35 40 45  
 Ser Ser Pro Val Thr Glu Ser Trp Leu Cys Cys Arg Thr Gln Pro Lys  
 50 55 60  
 Thr Phe Ser Thr Lys Ser Ser Pro Glu Thr Leu Ala Leu Thr Leu Ser  
 65 70 75 80  
 Pro Ser Leu Pro Ser Ala Pro Arg Leu Tyr Leu Val Ser Leu Cys Ala  
 85 90 95  
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 Arg Ala Leu Arg Asp Val Gln Gln His Pro Trp Leu Leu  
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<210> 1041  
 <211> 388  
 <212> DNA  
 <213> Homo sapiens

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<210> 1042  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 1042

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 Ala Leu Thr Ile Pro Val Leu Ala Leu Ser Met Ile Pro Ala Leu His  
 35 40 45  
 Phe Pro His Trp Pro Leu Trp Ala Leu Ala Leu Thr Thr Pro Val Val  
 50 55 60  
 Phe Trp Gly Ala Trp Pro Leu His His Ala Ala Trp Thr Asn Leu Arg  
 65 70 75 80  
 His Gly Ala Ala Ile Met Asp Thr Leu Val Ser Leu Gly Val Leu Thr  
 85 90 95  
 Ser Tyr Leu Trp Ser Val Trp Met Leu Thr Thr Gly Gly Glu His Leu  
 100 105 110  
 Tyr Leu Glu Val Ala Val His Arg His Asp Ala Asp Pro Gly Arg Gln  
 115 120 125  
 Ile

&lt;210&gt; 1043

&lt;211&gt; 555

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1043

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 120  
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 180  
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 240  
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 420  
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 480  
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&lt;210&gt; 1044

&lt;211&gt; 185

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1044

Thr Gly Glu Thr Leu Ile Gly Gln Ser Phe Ser Thr Val Pro Gly Gly

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Lys Gly Ala Asn Gln Ala Val Ala Ser Ala Arg Leu Gly Ala Glu Val			
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Ala Met Val Gly Cys Val Gly Thr Asp Ala Tyr Gly Ala Gln Leu Arg			
	35	40	45
Asp Ala Leu Leu Val Glu Gly Ile Asp Cys Gln Ala Val Ser Thr Val			
	50	55	60
Asp Gly Ser Ser Gly Val Ala Leu Ile Val Val Asp Asp Ser Ser Gln			
65	70	75	80
Asn Ala Ile Val Ile Val Ala Gly Ser Asn Gly Glu Leu Thr Pro Ala			
	85	90	95
Lys Leu Gln Thr Phe Asp Ser Val Leu Gln Ala Ala Asp Val Ile Val			
	100	105	110
Cys Gln Leu Glu Thr Pro Met Asp Thr Val Gly His Ala Pro Lys Arg			
	115	120	125
Gly Arg Glu Leu Gly Lys Thr Val Ile Leu Asn Pro Ala Pro Ala Ser			
	130	135	140
Gly Pro Leu Pro Glu Asp Trp Tyr Ala Ala Ile Asp Tyr Leu Ile Pro			
145	150	155	160
Asn Glu Ser Glu Ala Ser Ala Leu Ser Gly Val Val Val Asp Ser Leu			
	165	170	175
Asp Ser Ala Lys Val Ala Ala Thr Arg			
	180	185	

&lt;210&gt; 1045

&lt;211&gt; 371

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1045

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cactccaaat tccccgagac gcaccttatg aatctatttc tcggcgctctg caaggccctg  
120  
cgcgccatgc acgattacca cgcaccgccg gcagagcgca tgccaattgg gcaccgaagg  
180  
cagaccacca cccaggtgca aagcaacagt ggtagagcgg tcgctcatcg acgaaacgta  
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cggaagaaga cgaagagacg gagcaggaaa gacctgttat ggaatcacag aaccacatcg  
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360  
aagctcctcg g  
371

&lt;210&gt; 1046

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1046

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Asn Leu Phe Asn His Ser Lys Phe Pro Glu Thr His Leu Met Asn Leu			



1	5	10	15
Leu Ala Ser Leu Arg Asn Leu Asn Lys Asn Glu Val Thr Gln Val Arg			
20	25	30	
Ala Met Gln Arg Pro Pro Pro Gly Val Lys Leu Val Ile Glu Ala Val			
35	40	45	
Cys Ile Met Lys Gly Ile Lys Pro Lys Lys Val Pro Gly Glu Lys Pro			
50	55	60	
Gly Thr Lys Val Asp Asp Tyr Trp Glu Pro Gly Lys Gly Leu Leu Gln			
65	70	75	80
Asp Pro Gly His Phe Leu Glu Ser Leu Phe Lys Phe Asp Lys Asp Asn			
85	90	95	
Ile Gly Asp Val Val Ile Lys Ala Ile Gln Pro Tyr Ile Asp Asn Glu			
100	105	110	
Glu Phe Gln Pro Ala Thr Ile Ala Lys Val Ser Lys Gly Cys Pro Phe			
115	120	125	
Ile Trp Pro Trp Gly Gly Ala Met Pro Lys Tyr Pro Phe Val Ala Lys			
130	135	140	
Ala Val Glu Pro Lys Arg Gln Ala Leu Leu Glu Ala Gln Asp Asp Leu			
145	150	155	160
Gly Val Thr Gln Arg Ile Leu Asp Glu Ala Lys Gln Arg Leu Arg Glu			
165	170	175	
Val Glu Asp Gly Ile Ala Thr Met Gln Ala Lys Tyr Arg Glu Cys Ile			
180	185	190	
Thr Lys Lys Glu Glu Leu Glu Leu Lys Cys Glu Gln Cys Glu Gln Arg			
195	200	205	
Leu Gly His Ala Gly Lys Val Arg Thr Leu Leu Leu Gln Gly Leu Gln			
210	215	220	
Ala Gly Pro Ala Gln Thr Gly Ala Arg Lys Asp Gln Gly Ala Gly Gly			
225	230	235	240
Ser Trp Gly Gly Cys Pro Thr Pro Ser Leu Ala			
245	250		

&lt;210&gt; 1049

&lt;211&gt; 558

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1049

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120  
gccagcttga tttcaagaaa caactagaat aacagttttc tgataagaag tctatagcac  
180  
tttatggctt acataatcca gagatagatg ggctgggcat gattcccatt ttctgttggg  
240  
gaaaccgact cacagagaag ttaagggaca agtataaagt gatgaaactg tgtactgaac  
300  
ctcatgtctc ccagactccc ggggtccccgg gctttttctc ggggaggccc cattcacatt  
360  
gcaattcatg gccggggcaa atgctcacc acagagatat taagcactcc aacactccat  
420  
ccaccagggt gcagccaaag gattcagaag acaatgatca ttccatcagc atgcactatg  
480

cagctaaaga aagggttttgg catgctctgc tttattgttt cacagaagat aagaaaataa  
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 558

<210> 1050  
 <211> 112  
 <212> PRT  
 <213> Homo sapiens

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 Thr Pro Gly Ser Pro Gly Phe Phe Ser Gly Arg Pro His Ser His Cys  
 35 40 45  
 Asn Ser Trp Pro Gly Gln Met Leu Thr His Arg Asp Ile Lys His Ser  
 50 55 60  
 Asn Thr Pro Ser Thr Arg Leu Gln Pro Lys Asp Ser Glu Asp Asn Asp  
 65 70 75 80  
 His Ser Ile Ser Met His Tyr Ala Ala Lys Glu Arg Phe Trp His Ala  
 85 90 95  
 Leu Leu Tyr Cys Phe Thr Glu Asp Lys Lys Ile Asn Cys Lys Val Thr  
 100 105 110

<210> 1051  
 <211> 317  
 <212> DNA  
 <213> Homo sapiens

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 aatccgggta atcttcgtct caatttcagt cacatcgcac cggagcgtct ggacgaaggt  
 120  
 ctcaagcgcc tggctgctgt catccgtcac gcacaggctg cacaagcggc ttaaggggag  
 180  
 ggccatgtac aaggtttatg gcgattacca gtcgggcaat tgctacaaga tcaagctgat  
 240  
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 300  
 gagaccccg aattttt  
 317

<210> 1052  
 <211> 57  
 <212> PRT  
 <213> Homo sapiens

<400> 1052  
 Ala Leu Ser Arg Asp Val Ala Phe Met Pro Gly Glu Pro Phe Phe Ala  
 1 5 10 15  
 Glu Pro Glu Arg Asn Pro Gly Asn Leu Arg Leu Asn Phe Ser His Ile

	20		25		30										
Ala	Pro	Glu	Arg	Leu	Asp	Glu	Gly	Leu	Lys	Arg	Leu	Ala	Ala	Val	Ile
	35						40					45			
Arg	His	Ala	Gln	Ala	Ala	Gln	Ala	Ala							
	50						55								

<210> 1053  
 <211> 318  
 <212> DNA  
 <213> Homo sapiens

<400> 1053  
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 cggggagtg ggcctcgact atgcctacgc gatgtcggtg aacctgacca ccgagaaccg  
 120  
 gcgtgcctgg gaacgcgacc tgctcgagcg ttatctgtgg cgctcgccg aagaggggtgt  
 180  
 cgccaacccg cctcggttcg agcaagcgtg gctacgctac cggcaacagc cgttccacgt  
 240  
 cgggatcttc tcaactcttga ccatcgggcg cggaacgctt caaccggcca tgcaaccggc  
 300  
 ggactcnnnn ccccnnc  
 318

<210> 1054  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

Met	Gly	Leu	Tyr	Asp	Trp	Gln	Ala	Val	Ala	Arg	Gly	Glu	Trp	Ala	Leu
1				5					10					15	
Asp	Tyr	Ala	Tyr	Ala	Met	Ser	Val	Asn	Leu	Thr	Thr	Glu	Asn	Arg	Arg
		20						25				30			
Ala	Trp	Glu	Arg	Asp	Leu	Leu	Glu	Arg	Tyr	Leu	Trp	Arg	Leu	Ala	Glu
		35					40					45			
Glu	Gly	Val	Ala	Asn	Pro	Pro	Ser	Phe	Glu	Gln	Ala	Trp	Leu	Arg	Tyr
	50					55					60				
Arg	Gln	Gln	Pro	Phe	His	Val	Gly	Ile	Phe	Ser	Leu	Leu	Thr	Ile	Gly
65				70					75					80	
Ala	Gly	Arg	Phe	Gln	Pro	Ala	Met	Gln	Pro	Ala	Asp	Ser	Xaa	Pro	Xaa
			85					90						95	

<210> 1055  
 <211> 391  
 <212> DNA  
 <213> Homo sapiens

<400> 1055  
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aagaatcatc tctctgctca ggcaccggga gcaaggggca tctgtcgctc tgcagaacgg  
 180  
 aggggaccag gctgatgaa caccatcctg ggcccagaaa cctgggaggg taaagagaac  
 240  
 tgccaggggt gaagtccaag gatgggaaaa aggcctccgg ggcagagtcc tgaaatgtca  
 300  
 gaagtacacc aaagaggaaa cagcatcacg ttattgctga ggcagggcct cattctgttg  
 360  
 ccaaggctgc agtgcagtgg tgacaccatg g  
 391

<210> 1056  
 <211> 83  
 <212> PRT  
 <213> Homo sapiens

<400> 1056  
 Met Val Ser Pro Leu His Cys Ser Leu Gly Asn Arg Met Arg Pro Cys  
 1 5 10 15  
 Leu Ser Asn Asn Val Met Leu Phe Pro Leu Trp Cys Thr Ser Asp Ile  
 20 25 30  
 Ser Gly Leu Cys Pro Gly Gly Leu Phe Pro Ile Leu Gly Leu His Pro  
 35 40 45  
 Trp Gln Phe Ser Leu Pro Ser Gln Val Ser Gly Pro Arg Met Val Phe  
 50 55 60  
 Ile Arg Pro Gly Pro Leu Arg Ser Ala Glu Arg Gln Met Pro Leu Ala  
 65 70 75 80  
 Pro Gly Ala

<210> 1057  
 <211> 341  
 <212> DNA  
 <213> Homo sapiens

<400> 1057  
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 cccgatgata cgccgcgtcc gctgttcggg ttgccgcgca ttgcgtccag cgccgaggac  
 120  
 tatcaggcgc tgttcgatgc ggtaccgtcc aaggcgaacg gcatctgcct gtgcacgggt  
 180  
 tcgctcggcg tgcgcgcgga gaacgatctg cctgaaatgg ccgaacgttt cgccccgcgt  
 240  
 atcgcctttg cgcattctgcg cgcgaccaag cgcgacgccg atggcctgtc gtttcatgaa  
 300  
 tccgaccatc tcgacggcga tgcgacatg gtcgcgtgct c  
 341

<210> 1058  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens



&lt;400&gt; 1058

Glu Phe Pro Ala Arg Val Thr Pro Val Ala Glu Gln Leu Gly Val Ser  
 1 5 10 15  
 Leu Thr Leu His Pro Asp Asp Pro Pro Arg Pro Leu Phe Gly Leu Pro  
 20 25 30  
 Arg Ile Ala Ser Ser Ala Glu Asp Tyr Gln Ala Leu Phe Asp Ala Val  
 35 40 45  
 Pro Ser Lys Ala Asn Gly Ile Cys Leu Cys Thr Gly Ser Leu Gly Val  
 50 55 60  
 Arg Ala Glu Asn Asp Leu Pro Glu Met Ala Glu Arg Phe Gly Pro Arg  
 65 70 75 80  
 Ile Ala Phe Ala His Leu Arg Ala Thr Lys Arg Asp Ala Asp Gly Leu  
 85 90 95  
 Ser Phe His Glu Ser Asp His Leu Asp Gly Asp Val Asp Met Val Ala  
 100 105 110  
 Cys

&lt;210&gt; 1059

&lt;211&gt; 372

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1059

nagctgaccg gctggcagat caacatcatg acgccggaag aaagcgtgaa ccgccgggaa  
 60  
 gtcgagcggtt cgggcctgcg caccacgttc atgaacaagc tggacgtcga tgaggaagtc  
 120  
 gccgacatcc tgatcgacga aggtttcacc ggtatcgagg aaatcgcccta cgtcccccattg  
 180  
 caggaactgc tggagatcga ggcgttcgac gaagacacca tcaacgagtt gcgcgcgccgt  
 240  
 gcccgcaatg cgtcgtcgtgac cgaggccatc gcccgaggaag agcgccttga gaccgcgcag  
 300  
 gatctgcttg aactcgaagg cgtgacgcgc gaactggctg ccaagctggc cgagcgtcaa  
 360  
 gtgcgtacgc gt  
 372

&lt;210&gt; 1060

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1060

Xaa Leu Thr Gly Trp Gln Ile Asn Ile Met Thr Pro Glu Glu Ser Val  
 1 5 10 15  
 Asn Arg Arg Glu Val Glu Arg Ser Gly Leu Arg Thr Thr Phe Met Asn  
 20 25 30  
 Lys Leu Asp Val Asp Glu Glu Val Ala Asp Ile Leu Ile Asp Glu Gly  
 35 40 45  
 Phe Thr Gly Ile Glu Glu Ile Ala Tyr Val Pro Met Gln Glu Leu Leu  
 50 55 60  
 Glu Ile Glu Ala Phe Asp Glu Asp Thr Ile Asn Glu Leu Arg Ala Arg

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65              70              75              80
Ala Arg Asn Ala Leu Leu Thr Glu Ala Ile Ala Gln Glu Glu Arg Leu
              85              90              95
Glu Thr Ala Gln Asp Leu Leu Glu Leu Glu Gly Val Thr Pro Glu Leu
              100              105              110
Ala Ala Lys Leu Ala Glu Arg Gln Val Arg Thr Arg
              115              120

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<210> 1061  
 <211> 456  
 <212> DNA  
 <213> Homo sapiens

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<400> 1061
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60
cccttcgagg aaaccctttt gcaggccaag caagggctgc aagtgttttg gagctgagag
120
gagaaggagg attctggagc attgtatttg gcagccggag cgggcagtgg gcgggggggtt
180
gggacacgaa gggctcttcg gacccctgtg cctcttctgc cccaagggcg agaagacggg
240
cttcgcagcg accctcgggg gtccatggag ccgcctgcct tcgccccctc gctcttccca
300
ggtctgaacc tggatgggga gaagaaattg aagtgttttg gagacggggg ggcttaaaac
360
actagggagc ctcatcgccc agccttgggc ccactttcct ttcgatcgtg aggattccgc
420
acccgaage cgtcttctcg gggctcggg gcgcgc
456

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<210> 1062  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

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<400> 1062
Met Arg Leu Pro Ser Val Leu Ser Pro Pro Val Ser Lys Ala Leu Gln
1      5      10      15
Phe Leu Leu Pro Ile Gln Val Gln Thr Trp Glu Glu Arg Gly Gly Glu
20     25     30
Gly Arg Arg Leu His Gly Pro Pro Arg Val Ala Ala Lys Pro Val Phe
35     40     45
Ser Pro Leu Gly Gln Lys Arg His Arg Gly Pro Lys Ser Pro Ser Cys
50     55     60
Pro Asn Pro Pro Pro Thr Ala Arg Ser Gly Cys Gln Ile Gln Cys Ser
65     70     75     80
Arg Ile Leu Leu Leu Leu Ser Ala Pro Lys His Leu Gln Pro Leu Leu
85     90     95
Gly Leu Gln Lys Gly Phe Leu Glu Gly Ala Lys Gly Thr Phe Tyr Leu
100    105    110
Ser Tyr Leu Pro Ala Gln Pro Gly Ala Met Glu Ser Arg
115    120    125

```

<210> 1063  
<211> 3760  
<212> DNA  
<213> Homo sapiens

<400> 1063  
ntagtagaga cagggtttca ccatgttggc caggctggtc ttgaactcct gagcttgtga  
60  
tccacccgcc tcagcctccc aaagtgttg gattacaggc gtgacgactg caccagcct  
120  
taaggcttta taactagtaa atatctgcat taaagaacga gttgaatgaa aattctgata  
180  
aattcctact taaagtgtat ccaaagaaaa cggaataaagt ctaggagtta gtgatattag  
240  
attcagaaga atgagctttg taattcttaa aaattagtct cagaatagaa aggattttta  
300  
aagtaattga gtaaagtcac aggaatgtg accatataaa ggaatggctc taaatgtatt  
360  
aatccagaag gaagcaacag gttaaacagt aagaggtaag aaacaaaaaa taaggaacga  
420  
gagagagaga gtgacaggga gagagagaca gagcggggaa ggagagaatg agaaggaaaa  
480  
tcaggaaaac gaggagaaac agaattaagg aggtgatact ggaatagtat cagaccattc  
540  
tgaatcaatt taagaattgc catgtctaata tcttatatgg aagatttgaa atacaaggat  
600  
attgaaagga ataacaaatt ataatgaatg catagaaatc cttatgtaac ccaaggctcat  
660  
taatttgaag gaagacatca agaaaatgtg atctagaaat aaagggtgag attgctccat  
720  
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780  
gtcccatgga catatttcac agcaacaacg aatcaagtgc tgacctaaat ggggtatctg  
840  
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900  
tgcattcttg gaacagaatt ttagagatga tcatctctta catcagaagc aggatctaaa  
960  
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1020  
gttgcacac agatgaaaaa gtaaggccga agaagaccag agaagagttg gttgaatgtg  
1080  
tagatataag atccatctgt gacattgtag aatgaaattt caccggcttc atagtccaag  
1140  
aaaatcccaa tgcagtgagg actttccagt tggagaagag gcactgatgg ggaggcaagg  
1200  
accatgtact cattcccttt cagcagccac agggcccaga cccattctc aggagatggc  
1260  
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1380  
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1440

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1680  
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1740  
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2160  
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2280  
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2460  
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2520  
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2580  
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2640  
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2700  
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2760  
gggtcaggaa attgggcac cagggatcat ttagatcctg cttctgatgt aagagatgat  
2820  
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2880  
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2940  
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3000  
gaagattata gagcataata attttgtaaa tggagcaatc tcaacctcta tttctagatc  
3060

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 3180  
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 3240  
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 3480  
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 3540  
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 3600  
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 3660  
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 3720  
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 3760

<210> 1064

<211> 483

<212> PRT

<213> Homo sapiens

<400> 1064

Met	Gln	Gly	His	Val	Ser	Asn	Arg	Ser	Gly	Leu	Leu	Gly	Thr	Ser	Leu
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His	Gly	Ser	Pro	Ser	Cys	Thr	Leu	Arg	Arg	Ser	Ala	Val	Lys	Ser	Arg
			20					25					30		
Leu	Gly	Cys	Ala	Val	Ala	Gly	Ser	Ser	Phe	Thr	Ser	Thr	Trp	Asn	Phe
		35				40					45				
Leu	Lys	Ser	Ser	Leu	Leu	Pro	Gly	Met	Gln	His	Ala	Val	Phe	Ser	Ser
	50				55				60						
Met	Gly	Met	Phe	Ser	Ala	Ser	Ser	Leu	Val	Thr	Ala	Leu	Leu	Leu	Leu
65				70				75						80	
Arg	Thr	Pro	Leu	Thr	Pro	Ser	Ser	Arg	Pro	Arg	Ala	Gly	Arg	Trp	His
			85					90					95		
Leu	Ser	Cys	Ser	Ser	Ser	Ala	Ser	Ser	Phe	Arg	Ala	Leu	Leu	Cys	Trp
		100				105						110			
Thr	Ser	Arg	Leu	Leu	Leu	Ser	Arg	Ser	Leu	Cys	Ser	Val	Ala	Arg	Ser
	115				120						125				
Ser	Ala	Ser	Ser	Arg	Leu	Ser	Tyr	Gln	Val	Lys	Leu	Gln	Met	Ala	Leu
	130				135					140					
Glu	Leu	Met	Arg	Lys	Glu	Leu	Glu	Asp	Ala	Leu	Thr	Gln	Glu	Ala	Asn
145				150				155						160	
Val	Gly	Lys	Lys	Thr	Val	Ile	Trp	Lys	Glu	Lys	Val	Glu	Met	Gln	Arg
			165				170						175		
Gln	Arg	Phe	Arg	Leu	Glu	Phe	Glu	Lys	His	Arg	Gly	Phe	Leu	Ala	Gln

[illegible]

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<210> 1065
<211> 892
<212> DNA
<213> Homo sapiens
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120
ttgtccagtc tggaaggggg gaagaagaga tgaggggaag gctgtccagg ggggtgcaag
180
gccctagaga ccagcagag aagggaactct ggccactgaa ggggccctcc cattgtggct
240
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ctggttccct agagcagctc cagcttcttg gcctcccccg tctgatgctt agctcatccc  
 300  
 atccccctgga gtgctgtgga gcttagatga aacagcccag tgctcactct tcaatgagcc  
 360  
 caccagagc agcatcaaga tgcagttggc ggggtactgg aactggcttg gcaagggctg  
 420  
 cgcaggcaac aggtcccagc aagagtcagc tagcctagct cagccctgca cacctggaga  
 480  
 cctgggggtg ctccagacac ctcgccctt taggtccctt taattgaatg tgtgtggatc  
 540  
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 600  
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 660  
 gccctttgta ggaggggcat cacaggctgg ctcacctcag cagtgccagg cagagcccgt  
 720  
 ccctctcatt gcaggaggcg catgaagcgt gtctgggacc gagctgtgga gttcctggcc  
 780  
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 892

<210> 1066

<211> 76

<212> PRT

<213> Homo sapiens

<400> 1066

Met	Cys	Ala	Leu	Cys	Arg	Arg	Gly	Ile	Thr	Gly	Trp	Leu	Thr	Ser	Ala
1				5				10						15	
Val	Pro	Gly	Arg	Ala	Arg	Pro	Ser	His	Cys	Arg	Arg	Arg	Met	Lys	Arg
			20					25					30		
Val	Trp	Asp	Arg	Ala	Val	Glu	Phe	Leu	Ala	Ser	Asn	Glu	Ser	Arg	Ile
		35					40				45				
Gln	Thr	Glu	Ser	His	Arg	Val	Ala	Gly	Glu	Asp	Met	Leu	Val	Leu	Arg
	50					55				60					
Trp	Thr	Lys	Pro	Ser	Ser	Phe	Ser	Asp	Ser	Glu	Arg				
65					70					75					

<210> 1067

<211> 418

<212> DNA

<213> Homo sapiens

<400> 1067

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 120  
 ggactagaca tctggaaagc ccgagtctcc gctgacatcg aaggcgactg gactatgcac  
 180  
 gttgaaggct ggtcagacac ctggggcacg tggcatcaca atgccaatgc caagctcgcc  
 240

gctgccatcg acgtcgaact ggtgtgcgcc gaaggccatg ccctcataaa cgaggcggtc  
 300  
 cggcacgccc agcaatccgg ggatactgac gcgatcacgg ctctgcgca gaccgatgcc  
 360  
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 418

<210> 1068

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1068

Glu	Phe	Glu	Val	Thr	Ala	Asn	Val	Phe	Arg	Glu	Gly	His	Asp	Ala	Val
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Gly	Ala	Ser	Val	Val	Leu	Thr	Asp	Pro	Glu	Gly	Asn	Arg	His	Leu	Thr
			20					25					30		
Asp	Met	His	Gln	Val	Glu	Pro	Trp	Gly	Leu	Asp	Ile	Trp	Lys	Ala	Arg
		35					40					45			
Val	Ser	Ala	Asp	Ile	Glu	Gly	Asp	Trp	Thr	Met	His	Val	Glu	Gly	Trp
	50					55					60				
Ser	Asp	Thr	Trp	Gly	Thr	Trp	His	His	Asn	Ala	Asn	Ala	Lys	Leu	Ala
65					70					75				80	
Ala	Ala	Ile	Asp	Val	Glu	Leu	Val	Cys	Ala	Glu	Gly	His	Ala	Leu	Ile
				85					90					95	
Asn	Glu	Ala	Val	Arg	His	Ala	Glu	Gln	Ser	Gly	Asp	Thr	Asp	Ala	Ile
			100					105					110		
Thr	Ala	Leu	Arg	Glu	Thr	Asp	Ala	Asn	Leu	Thr	Leu	Asp	Arg	Ala	Pro
		115					120					125			
Asp	Ser	Leu	Gln	Gln	Val	Ile	Asn	Thr	Tyr	Ala					
		130					135								

<210> 1069

<211> 371

<212> DNA

<213> Homo sapiens

<400> 1069

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 60  
 cagttcatat gccgtcactc ccagggaacca ccagtcaaca gcaaaggaat agcctgctcc  
 120  
 ttttctggag ctgaacatct caggtgccat gtaaggcttg gtgccagcca tgggtggagac  
 180  
 ctgcgttatc acctgcaaca gaacgtccac ttcaaggaag aaacagtgaa gctcttcac  
 240  
 tgtgagctgg tcatggccct ggactacctg cagaaccagc gcatcattca cagggatatg  
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 360  
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 371

<210> 1070



&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1070

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Xaa Tyr Asn Phe Leu Ala Gly Ser Thr Gly Ala Asn Met Ile Arg Ser
 1           5           10           15
Pro Ala Ser Gln Gln Phe Ile Cys Arg His Ser Gln Gly Pro Pro Val
 20           25           30
Asn Ser Lys Gly Ile Ala Cys Ser Phe Ser Gly Ala Glu His Leu Arg
 35           40           45
Cys His Val Arg Leu Gly Ala Ser His Gly Gly Asp Leu Arg Tyr His
 50           55           60
Leu Gln Gln Asn Val His Phe Lys Glu Glu Thr Val Lys Leu Phe Ile
65           70           75           80
Cys Glu Leu Val Met Ala Leu Asp Tyr Leu Gln Asn Gln Arg Ile Ile
 85           90           95
His Arg Asp Met Lys Pro Asp Asn Ile Leu Leu Asp Glu His Gly His
100          105          110
Val His Ile Thr Asp Phe Asn Ile Ala Ala Met
115          120

```

&lt;210&gt; 1071

&lt;211&gt; 998

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1071

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nnacgcggttt gtgtcggtcca tcagaagctg tgctcgattt gttaccgcaa gagcagcgtg
60
ggagtttctgt caaggaagac ggacaaatcg tcattgatga gaatggcaac agggtttgat
120
cccacccgaa gtacgtggcc ttggagtgcc attcgactc cacttggcca cggtttgcgt
180
tcgacctaac cagcaattgc atctcgtttg acctgctcgc gttgtcaaca tcatagcaac
240
gagcggccaa tagcagagtt ctggatcatc tgttcggccc ttctctctat ttgaagcctc
300
agtttcagca aagagctggt tatgagtttt cgtcaaacg gcgcttgat aggcataagg
360
ggtataccta tgatgcgtgt attcacagtt aaaaagggtt ctctcatggg ccatacagct
420
tcaaacaaag acgatcttct caaacgcgtg aaacgcacg cggggcaaat ccaggccggt
480
gagcgtgcac tggagtcgga tgccgattgc gcgaaaacat tgcattctgt agctgccaca
540
cgtggagcta tcaacggctt gatggacgaa attattgagg atcacgccag aaaacatgtg
600
gcgagcccaa cgcttagcga ttaataacgc aacaagggtg tcgaagagct tcttgaagcc
660
attcgccgct actccaagtg aagaatccag gtacatgtcc atgagtagca gcccataat
720
cgagattagc cacatacatg accatgtggt ccttgggtca gcacgcgaag aaaatgccaa
780

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gcgtaccctt tgggttgtgg cgcttacggt ggtgatgatg gttggcgaaa tcgtcgccgg  
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 ctatctcact ggctcaatgg ctttacttgc cgacggggtt tcacaaggca accccatgca  
 900  
 ggcgcttttg gcatcgctgc agctgcctac ggttacgcaa aacgccacgc ttccagcagt  
 960  
 cgttatagct tcggtacggg caagggttga gacctagg  
 998

<210> 1072  
 <211> 72  
 <212> PRT  
 <213> Homo sapiens

<400> 1072  
 Met Gly His Thr Ala Ser Asn Lys Asp Asp Leu Leu Lys Arg Val Lys  
 1 5 10 15  
 Arg Ile Ala Gly Gln Ile Gln Ala Val Glu Arg Ala Leu Glu Ser Asp  
 20 25 30  
 Ala Asp Cys Ala Lys Thr Leu His Leu Val Ala Ala Thr Arg Gly Ala  
 35 40 45  
 Ile Asn Gly Leu Met Asp Glu Ile Ile Glu Asp His Ala Arg Lys His  
 50 55 60  
 Val Ala Ser Pro Thr Leu Ser Asp  
 65 70

<210> 1073  
 <211> 468  
 <212> DNA  
 <213> Homo sapiens

<400> 1073  
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 120  
 ttccccact gataaaatct tgcttctctt caaactccta ggcaaatttc tctacttca  
 180  
 gaaagtcttg tttctccata tccttcgtaa ccaccacctg gtgcacatgc tgaaggcaga  
 240  
 attcattgtc tctctctctt cactctcgaa tagctttgcc cagacctca ggtactcctt  
 300  
 catcctctgt ataatatattg gttttcacct ctttatgaac tcttttgtat totcattact  
 360  
 ggctctggaa ccagaacat accacgggtt caagggtatgt tttaatgaat tgaatggaat  
 420  
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 468

<210> 1074  
 <211> 134  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 1074

```

Met Asp Asn Phe Leu Phe Phe Lys Tyr Thr Leu Pro Met Ser Gln Leu
 1           5           10           15
Gly Cys Phe Ser Pro Thr Asp Lys Ile Leu Leu Leu Phe Lys Leu Leu
          20           25           30
Gly Lys Phe Leu Leu Leu Gln Lys Val Leu Phe Leu His Ile Leu Arg
          35           40           45
Asn His His Leu Val His Met Leu Lys Ala Glu Phe Ile Val Ser Ser
          50           55           60
Pro Ser Leu Ser Asn Ser Phe Ala Gln Thr Leu Arg Tyr Ser Phe Ile
65           70           75           80
Leu Cys Ile Ile Phe Gly Phe His Leu Phe Met Asn Ser Phe Val Phe
          85           90           95
Ser Leu Leu Ala Leu Glu Pro Arg Thr Tyr His Gly Phe Lys Val Cys
          100          105          110
Phe Asn Glu Leu Asn Gly Ile Asn Phe Val Val Leu Met Gln Ile Gln
          115          120          125
Met Pro Leu Asn Thr Asp
          130

```

&lt;210&gt; 1075

&lt;211&gt; 1633

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1075

```

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60
cagcagcaag aacaaacagc ttcgcaacga cttcaagctg gtggagaaca ttctggccaa
120
gcgcctgctg atcctgcccc aggaggagga ctatggcttt gacatcgagg agaagaacaa
180
ggctgtggtg gtgaagtccg tccagagggg cttgctggct gaggtggctg gcctgcaggt
240
ggggaggaag atctactcca tcaatgagga cctgggtgtt ctgcggccgt tttcagaggt
300
ggagtccatc ctcaaccagt ctttctgctc ccgcgcct ctgcgcctcc tgggtggccac
360
gaaggccaaa gagatcatca aaatccccga ccagccggac acactgtgct tccagattcg
420
tggagctgcc ccaccgtacg tctatgctgt ggggagaggg tctgaggcca tggctgcagg
480
gctctgtgct ggtcagtgc tctgaaggt caatggcagc aacgtgatga acgatgggtgc
540
ccctgaggtc ctggagcact tccaggcatt ccggagtcgg cgcgaagagg ccctgggcct
600
gtaccagtgg atctaccaca cccatgagga tgcccaggaa gcacgagcca gtcaggaggc
660
ctccactgag gaccccagtg gcgagcaggc ccaggaggaa gaccaggctg attcagcctt
720
cccactgctg tccctgggtc cccggctgag cctgtgtgag ggcagcccca tggtcaccct
780
gactgtggac aacgtgcacc tggaacacgg cgtgggtgtat gagtatgtga gcacggcagg
840

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cgtcaggtgc catgtgctgg agaagatcgt ggagccccgc ggctgcttcg gcctcaccgc  
 900  
 caagatcctc gaggcctttg ctgccaatga cagcgtcttc gtggagaact gcaggcggt  
 960  
 catggccctg agcagcgcca tcgtgaccat gcccacttt gagttccgca acatctgtga  
 1020  
 caccaagctg gagagcattg gccagaggat tgcctgctac caggagtttg cagcccaact  
 1080  
 gaagagcagg gtcagcccac ccttcaaaca agccccctg gagccccacc cgctgtgtgg  
 1140  
 cctacttctg ccccaaccaat tgccacatca acctcatgga agtgtcctac cccaagacca  
 1200  
 cccctcagt gggcaggtcc ttcagcatcc gctttggacg caaacctcc ctcacggcc  
 1260  
 ttgaccgga gcaaggccac ctgaacccca tgcgtacac ccagcactgc atcaccacca  
 1320  
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 1380  
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 1440  
 gcttcctact caagcaggag gaccgtgaga tccaggatgc ctacctgcag ctcttcacca  
 1500  
 agctggatgt ggccctgaag gagatgaagc aatatgtcac ccagatcaac aggctgctgt  
 1560  
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 1620  
 cctccctgcc cct  
 1633

<210> 1076  
 <211> 87  
 <212> PRT  
 <213> Homo sapiens

<400> 1076  
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 1 5 10 15  
 Cys Ser Pro Thr Glu Glu Gln Gly Gln Pro Thr Leu Gln Thr Ser Pro  
 20 25 30  
 Pro Gly Ala Pro Pro Ala Val Trp Pro Thr Ser Ala Pro Pro Ile Ala  
 35 40 45  
 Thr Ser Thr Ser Trp Lys Cys Pro Thr Pro Arg Pro Pro Pro Gln Trp  
 50 55 60  
 Ala Gly Pro Ser Ala Ser Ala Leu Asp Ala Asn Pro Pro Ser Ser Ala  
 65 70 75 80  
 Leu Thr Arg Ser Lys Ala Thr  
 85

<210> 1077  
 <211> 419  
 <212> DNA  
 <213> Homo sapiens

<400> 1077

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 gcaaacgagg caacatgttt gcgcctcgcc ggagcaccct caccagcga tgctttgttt  
 120  
 caccagagt ttacatatcc aatttttggga gaggtgagg caatttacgg ctacaacggc  
 180  
 ttgcacatga atcttgctt tgcgagcggc agcctggtgc cgtcgctcga aatcacttac  
 240  
 cgcgctaaga atacgacgac gtccgctaaa gtagatgacg tggagcaggc tctgcgcgga  
 300  
 gtgtccccgc cagatgtcgt tactcctgca gaacttgatg ctatcgttgc acgcgacgcc  
 360  
 agggcggtcc gggcgcatth acgccgccgg gcaccaagat tgcgacgtac actcgcgcg  
 419

<210> 1078

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1078

Xaa	Arg	Val	Thr	Arg	Leu	Ala	Thr	Arg	Leu	His	Ser	Met	Ser	Thr	Lys
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Trp	Thr	Cys	Asn	Ala	Asn	Glu	Ala	Thr	Cys	Leu	Arg	Leu	Ala	Gly	Ala
			20					25					30		
Pro	Ser	Pro	Ser	Asp	Ala	Leu	Phe	His	Pro	Glu	Phe	Thr	Tyr	Pro	Ile
		35					40					45			
Phe	Gly	Glu	Ala	Glu	Ala	Ile	Tyr	Gly	Tyr	Asn	Gly	Leu	His	Met	Asn
	50					55					60				
Leu	Ala	Phe	Ala	Ser	Gly	Ser	Leu	Val	Pro	Ser	Leu	Glu	Ile	Thr	Tyr
65					70					75				80	
Arg	Ala	Lys	Asn	Thr	Thr	Thr	Ser	Ala	Lys	Val	Asp	Asp	Val	Glu	Gln
			85						90					95	
Ala	Leu	Arg	Gly	Val	Leu	Pro	Pro	Asp	Val	Val	Thr	Pro	Ala	Glu	Leu
			100					105					110		
Asp	Ala	Ile	Val	Ala	Arg	Asp	Ala	Arg	Ala	Val	Arg	Ala	His	Leu	Arg
		115				120						125			
Arg	Arg	Ala	Pro	Arg	Leu	Arg	Arg	Thr	Leu	Ala					
	130					135									

<210> 1079

<211> 584

<212> DNA

<213> Homo sapiens

<400> 1079

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 120  
 gctcaaactg cttcccaagc cagcagggag gggaaccatg ctgcctgctg acctgggtag  
 180  
 ttctatttag gtcttgtgac acaacagtgg gcaagtgat gccctctgtg accaaaagta  
 240

ttaccccaa gttccccag gccctccctt tcgtctgcaa agacacacat ctgtttcact  
 300  
 gtgtcttctg caaagacaca catctgtttc actgggggtt tctgcaaaga caccatttg  
 360  
 tttcccttt taagggtttt cccctccatc ttgtctattt ttaaaaaaat aaaccgggtt  
 420  
 cccaggatag ccttcccccc cagatcaaga gcccatgtga aatgaggggg cgcacttgac  
 480  
 cacagcacct tgttcctttc tgtaatctag acacttctgc acaatagagg gccaccct  
 540  
 caagggcaca ggccatgggt tgctctcagg ctccctccac gcgt  
 584

<210> 1080

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1080

Met	Leu	His	Val	Val	Ser	Ala	Ser	Gln	Pro	Trp	Glu	Met	Tyr	Pro	His
1				5					10					15	
Ala	Val	Ala	Ser	Thr	Ile	Gly	Leu	Leu	Phe	Leu	Leu	Cys	Ser	Asn	Cys
			20					25					30		
Phe	Pro	Ser	Gln	Gln	Gly	Gly	Glu	Pro	Cys	Cys	Leu	Leu	Thr	Trp	Val
		35					40					45			
Val	Leu	Phe	Arg	Ser	Cys	Asp	Thr	Thr	Val	Gly	Lys	Val	Met	Pro	Ser
	50					55				60					
Val	Thr	Lys	Ser	Ile	Tyr	Pro	Lys	Phe	Pro	Gln	Ala	Leu	Pro	Phe	Val
65				70						75				80	
Cys	Lys	Asp	Thr	His	Leu	Phe	His	Cys	Val	Phe	Cys	Lys	Asp	Thr	His
				85				90						95	
Leu	Phe	His	Trp	Gly	Phe	Leu	Gln	Arg	His	Pro	Phe	Val	Ser	Pro	Phe
			100					105					110		
Lys	Gly	Phe	Pro	Leu	His	Leu	Val	Tyr	Phe						
		115					120								

<210> 1081

<211> 3077

<212> DNA

<213> Homo sapiens

<400> 1081

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 120  
 tatatccaca atgggaagaa atccagggcc ttaagcccc tatctctgtt ggccatagag  
 180  
 cagacatctc ttaagatgat gcaggcagta ggaggtgcac ctgcacgtcc cactggagaa  
 240  
 tatatctgta atcaatgtgg tgctaagtac acatccctag acagctttca gactcaccta  
 300  
 aaaactcatc tcgacactgt gcttccaaaa ttgacctgtc ctacgtgcaa caaggaattc  
 360

cccaaccaag aatccttgct gaagcatggt accattcact ttatgatcac ttcaacgtat  
420  
tacatctgtg agagttgtga caagcaattc acatcagtgg atgaccttca gaaacacctg  
480  
ctggacatgc acacctttgt cttcttttgc tgcaccctct gccaggaagt ttttgactca  
540  
aaagtctcca ttcagctcca cttggctgtg aagcacagta acgaaaagaa agtctatagg  
600  
tgcacatctt gcaactggga cttccgcaac gaaactgact tgcagctcca tgtgaaacac  
660  
aaccacctgg aaaaccaagg gaaagtgcac aagtgcattt tctgcggtga gtcctttggc  
720  
accgaggtgg agctgcaatg ccacatcacc actcacagta agaagtacaa ctgcaagttc  
780  
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900 agctgcagac tttgtgacc aacagccagg agtcccacaa cagtcacgat 960  
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1020  
gcctacacta tggaaacttt gctgcagaat caccagctcc gagaccacaa catcagacct  
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ggagaaagtg ccatcgtgaa aaagaaagct gagctcatta aagggaatta caagtgcagc  
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1680  
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1740  
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1800  
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1860  
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1920  
tatcaatgca tcaagtgtca gatggttttc tacaatgaat gggatattca ggttcatgtt  
1980  
gcaaatcaca tgattgatga aggactgaac catgaatgca aactctgcag ccagacctt  
2040

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 2100  
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 2580  
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 2700  
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 2760  
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 3060  
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 3077

&lt;210&gt; 1082

&lt;211&gt; 757

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1082

Xaa	Pro	Val	Val	Glu	Val	Tyr	Ser	Cys	Ser	Tyr	Cys	Thr	Asn	Ser	Pro
1				5					10					15	
Ile	Phe	Asn	Ser	Val	Leu	Lys	Leu	Asn	Lys	His	Ile	Lys	Glu	Asn	His
		20						25					30		
Lys	Asn	Ile	Pro	Leu	Ala	Leu	Asn	Tyr	Ile	His	Asn	Gly	Lys	Lys	Ser
		35					40					45			
Arg	Ala	Leu	Ser	Pro	Leu	Ser	Pro	Val	Ala	Ile	Glu	Gln	Thr	Ser	Leu
	50					55					60				
Lys	Met	Met	Gln	Ala	Val	Gly	Gly	Ala	Pro	Ala	Arg	Pro	Thr	Gly	Glu
65					70					75				80	
Tyr	Ile	Cys	Asn	Gln	Cys	Gly	Ala	Lys	Tyr	Thr	Ser	Leu	Asp	Ser	Phe



				85					90					95			
Gln	Thr	His	Leu	Lys	Thr	His	Leu	Asp	Thr	Val	Leu	Pro	Lys	Leu	Thr		
			100					105					110				
Cys	Pro	Gln	Cys	Asn	Lys	Glu	Phe	Pro	Asn	Gln	Glu	Ser	Leu	Leu	Lys		
		115					120					125					
His	Val	Thr	Ile	His	Phe	Met	Ile	Thr	Ser	Thr	Tyr	Tyr	Ile	Cys	Glu		
	130					135					140						
Ser	Cys	Asp	Lys	Gln	Phe	Thr	Ser	Val	Asp	Asp	Leu	Gln	Lys	His	Leu		
145					150				155						160		
Leu	Asp	Met	His	Thr	Phe	Val	Phe	Phe	Arg	Cys	Thr	Leu	Cys	Gln	Glu		
			165					170						175			
Val	Phe	Asp	Ser	Lys	Val	Ser	Ile	Gln	Leu	His	Leu	Ala	Val	Lys	His		
			180					185					190				
Ser	Asn	Glu	Lys	Lys	Val	Tyr	Arg	Cys	Thr	Ser	Cys	Asn	Trp	Asp	Phe		
	195						200					205					
Arg	Asn	Glu	Thr	Asp	Leu	Gln	Leu	His	Val	Lys	His	Asn	His	Leu	Glu		
	210					215					220						
Asn	Gln	Gly	Lys	Val	His	Lys	Cys	Ile	Phe	Cys	Gly	Glu	Ser	Phe	Gly		
225					230				235						240		
Thr	Glu	Val	Glu	Leu	Gln	Cys	His	Ile	Thr	Thr	His	Ser	Lys	Lys	Tyr		
			245					250						255			
Asn	Cys	Lys	Phe	Cys	Ser	Lys	Ala	Phe	His	Ala	Ile	Ile	Leu	Leu	Glu		
	260							265					270				
Lys	His	Leu	Arg	Glu	Lys	His	Cys	Val	Phe	Glu	Thr	Lys	Thr	Pro	Asn		
	275					280						285					
Cys	Gly	Thr	Asn	Gly	Ala	Ser	Glu	Gln	Val	Gln	Lys	Glu	Glu	Val	Glu		
	290				295						300						
Leu	Gln	Thr	Leu	Leu	Thr	Asn	Ser	Gln	Glu	Ser	His	Asn	Ser	His	Asp		
305					310				315						320		
Gly	Ser	Glu	Glu	Asp	Val	Asp	Thr	Ser	Glu	Pro	Met	Tyr	Gly	Cys	Asp		
			325					330						335			
Ile	Cys	Gly	Ala	Ala	Tyr	Thr	Met	Glu	Thr	Leu	Leu	Gln	Asn	His	Gln		
			340					345					350				
Leu	Arg	Asp	His	Asn	Ile	Arg	Pro	Gly	Glu	Ser	Ala	Ile	Val	Lys	Lys		
	355					360						365					
Lys	Ala	Glu	Leu	Ile	Lys	Gly	Asn	Tyr	Lys	Cys	Ser	Val	Cys	Ser	Arg		
	370				375						380						
Thr	Phe	Phe	Ser	Glu	Asn	Gly	Leu	Arg	Glu	His	Met	Gln	Thr	His	Leu		
385					390				395						400		
Gly	Pro	Val	Lys	His	Tyr	Met	Cys	Pro	Ile	Cys	Gly	Glu	Arg	Phe	Pro		
			405					410						415			
Ser	Leu	Leu	Thr	Leu	Thr	Glu	His	Lys	Val	Thr	His	Ser	Lys	Ser	Leu		
			420					425					430				
Asp	Thr	Gly	Asn	Cys	Arg	Ile	Cys	Lys	Met	Pro	Leu	Gln	Ser	Glu	Glu		
	435						440					445					
Glu	Phe	Leu	Glu	His	Cys	Gln	Met	His	Pro	Asp	Leu	Arg	Asn	Ser	Leu		
	450					455					460						
Thr	Gly	Phe	Arg	Cys	Val	Val	Cys	Met	Gln	Thr	Val	Thr	Ser	Thr	Leu		
465					470				475						480		
Glu	Leu	Lys	Ile	His	Gly	Thr	Phe	His	Met	Gln	Lys	Thr	Gly	Asn	Gly		
			485					490						495			
Ser	Ala	Val	Gln	Thr	Thr	Gly	Arg	Gly	Gln	His	Val	Gln	Lys	Leu	Tyr		
			500					505					510				
Lys	Cys	Ala	Ser	Cys	Leu	Lys	Glu	Phe	Arg	Ser	Lys	Gln	Asp	Leu	Val		

```

      515                      520                      525
Lys Leu Asp Ile Asn Gly Leu Pro Tyr Gly Leu Cys Ala Gly Cys Val
      530                      535                      540
Asn Leu Ser Lys Ser Ala Ser Pro Gly Ile Asn Val Pro Pro Gly Thr
545                      550                      555                      560
Asn Arg Pro Gly Leu Gly Gln Asn Glu Asn Leu Ser Ala Ile Gly Glu
      565                      570                      575
Arg Gln Gly Gly Gly Thr Glu Thr Arg Cys Ser Ser Cys Asn Val Lys
      580                      585                      590
Phe Glu Ser Glu Ser Glu Leu Gln Asn His Ile Gln Thr Ile His Arg
      595                      600                      605
Glu Leu Val Pro Asp Ser Asn Ser Thr Gln Leu Lys Thr Pro Gln Val
      610                      615                      620
Ser Pro Met Pro Arg Ile Ser Pro Ser Gln Ser Asp Glu Lys Lys Thr
625                      630                      635                      640
Tyr Gln Cys Ile Lys Cys Gln Met Val Phe Tyr Asn Glu Trp Asp Ile
      645                      650                      655
Gln Val His Val Ala Asn His Met Ile Asp Glu Gly Leu Asn His Glu
      660                      665                      670
Cys Lys Leu Cys Ser Gln Thr Phe Asp Ser Pro Ala Lys Leu Gln Cys
      675                      680                      685
His Leu Ile Glu His Ser Phe Glu Gly Met Gly Gly Thr Phe Lys Cys
      690                      695                      700
Pro Val Cys Phe Thr Val Phe Val Gln Ala Asn Lys Leu Gln Gln His
705                      710                      715                      720
Ile Phe Ser Ala His Gly Gln Glu Asp Lys Ile Tyr Asp Cys Thr Gln
      725                      730                      735
Cys Pro Gln Lys Phe Phe Phe Gln Thr Glu Leu Gln Asn His Thr Met
      740                      745                      750
Thr Gln His Ser Ser
      755

```

&lt;210&gt; 1083

&lt;211&gt; 516

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1083

```

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60
agatccgaat aacctgcccg ctcccgtga gcccgaggaa gaggagaaga agtgaccgat
120
ccactgaccc cggttctgtc ggccaattgg gatgaagagc gcagttggaa gctgcttaac
180
tacgagcgac agggcgata caccggcctt cgtaaggctt tgacgatgcc gcctgacgac
240
gttgtctcgc tggtaagga cgctaacctg cgtggccgtg gtggcgccgg gttccccacc
300
ggcatgaagt ggtccttcgt gcctaaggac aatcccaacc cgacctacct cgttgtcaac
360
ggcgacgagt ctgagccggg cacgtgcaag gacatgccgc tcatgatggc ctccccgcac
420
accctcgtcg agggcgatcat cattgcctcc tacgccatca aggccaatgat ggccttcac
480

```

tacatccgcg gtgaggtgct gcacgtcgtc cgacgc  
516

<210> 1084  
<211> 142  
<212> PRT  
<213> Homo sapiens

<400> 1084  
Ala Arg Gly Arg Gly Glu Glu Val Thr Asp Pro Leu Thr Pro Val Leu  
1 5 10 15  
Ser Ala Asn Trp Asp Glu Glu Arg Ser Trp Lys Leu Leu Asn Tyr Glu  
20 25 30  
Arg Gln Gly Gly Tyr Thr Gly Leu Arg Lys Ala Leu Thr Met Pro Pro  
35 40 45  
Asp Asp Val Val Ser Leu Val Lys Asp Ala Asn Leu Arg Gly Arg Gly  
50 55 60  
Gly Ala Gly Phe Pro Thr Gly Met Lys Trp Ser Phe Val Pro Lys Asp  
65 70 75 80  
Asn Pro Asn Pro Thr Tyr Leu Val Val Asn Gly Asp Glu Ser Glu Pro  
85 90 95  
Gly Thr Cys Lys Asp Met Pro Leu Met Met Ala Ser Pro His Thr Leu  
100 105 110  
Val Glu Gly Val Ile Ile Ala Ser Tyr Ala Ile Lys Ala Lys Met Ala  
115 120 125  
Phe Ile Tyr Ile Arg Gly Glu Val Leu His Val Val Arg Arg  
130 135 140

<210> 1085  
<211> 374  
<212> DNA  
<213> Homo sapiens

<400> 1085  
acgcgtagcg tttatacata gttttcacgt agccatacct ccatgtgggt catacgttca  
60  
aaatcgtaga gtgtctctga gctgcctagg gggctgtttg cgatcttgcg gacagtgtct  
120  
atatacaciaa gggttcagctc cgccaggaga ctgtcgccga tcattttcag gaagttttct  
180  
ttgctgcggtt cgtagtcttg gtgcaggtag aagctgtagt cgcttttgta gatgtcccgg  
240  
tagaagaact cgggcagggt gcctttcatg gcttccagga tgacggggtt gctcatcccg  
300  
tgcccgcctca gaacacccgg gtacaccagg gaagagcgga tcatgtcgtc ctcaaggtag  
360  
ggggcggcga attc  
374

<210> 1086  
<211> 110  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 1086

```

Met Ile Arg Ser Ser Leu Val Tyr Pro Gly Val Leu Ser Gly His Gly
 1             5             10             15
Met Ser Lys Pro Val Ile Leu Glu Ala Met Lys Gly Thr Leu Pro Glu
      20             25             30
Phe Phe Tyr Arg Asp Ile Tyr Lys Ser Asp Tyr Ser Phe Asp Leu His
      35             40             45
Gln Asp Tyr Glu Arg Ser Lys Glu Asn Phe Leu Lys Met Ile Gly Asp
      50             55             60
Ser Leu Leu Ala Glu Leu Asn Leu Val Asp Ile Asp Thr Val Arg Lys
65             70             75             80
Ile Ala Asn Ser Pro Leu Gly Ser Ser Glu Thr Leu Tyr Asp Phe Glu
      85             90             95
Arg Met Thr His Met Glu Val Trp Leu Arg Glu Asn Tyr Val
      100             105             110

```

&lt;210&gt; 1087

&lt;211&gt; 423

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1087

```

atgacgatcg tggccccacc accgccgacc gcgggcgccg ccattagctt ccttgctcgac
60
ggcatccacc cgcacgacct cggccaggtc ctcgacgacc acggcgtgag catccgggtg
120
nggcaccact gtgcctggcc catccaccgg agtctagggg tgcaatccac cgcccgtgca
180
tcgtttctact tctacaacac tttcccggaa gtggatgcgt tagcgtcggc ggtgcggggc
240
gcccggaat ttttcggagt gcattaggat tgggtctgaac gtgaaccttg aatccatgta
300
ccaggaagtc atcctggacc actacaagaa tcccacgcac gcagggttga aggctccctt
360
tgatgccgaa gtgcaccatg tgaaccttc ctgcggtgac ganaccgtct ccgggtgaag
420
ctt
423

```

&lt;210&gt; 1088

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1088

```

Met Thr Ile Val Ala Pro Pro Pro Pro Thr Ala Gly Ala Ala Ile Ser
 1             5             10             15
Phe Leu Val Asp Gly Ile His Pro His Asp Leu Gly Gln Val Leu Asp
      20             25             30
Asp His Gly Val Ser Ile Arg Val Xaa His His Cys Ala Trp Pro Ile
      35             40             45
His Arg Ser Leu Gly Val Gln Ser Thr Ala Arg Ala Ser Phe Tyr Phe
      50             55             60
Tyr Asn Thr Phe Pro Glu Val Asp Ala Leu Ala Ser Ala Val Arg Ala

```

```

65                               70
Ala Arg Glu Phe Phe Gly Val His
                               85

```

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<210> 1089
<211> 750
<212> DNA
<213> Homo sapiens
```

```

<400> 1089
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120
agagtggtaa gaatggggct cggggaagaa gccttacccc ttttcttctt taatttggcg
180
aaaggacttt tgggcccaagg tcaccctagc cttctcttgg gggcctcaat tttccttcac
240
tctgtaaaaa atgggggggt aattcagaag taccctcctt attgtcaggg ttttggggaa
300
gggagtaaaa agaaattggc ttgggaaaat acttaataca gggcctgggc atgtaacaaa
360
tattcacaaa atgctagcag ttatcaccac agtgggagcc acagggagct ctgaggataa
420
gcagggatgt cgagggatgg gacagaactt gattgaaggc agacagacct ccaaattctt
480
gactcagaca gaatgatcac tgatccagcg agacgtcagg atcgagagga gtgtagcaag
540
gagtcaggag ggtgggcctg cgccagtgtc gccccgactc tgttcagtaa catgaaggca
600
aacacagaag ggcattgtgcg gagacacacg tgatcacgct agtgatgcag aggcagacct
660
agacaaaaga ccgagacagg agctaggcag acacacagac agagacagcc ccgcggagtc
720
atgtagacag ggataatgac aggaacgcgt
750

```

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<210> 1090
<211> 103
<212> PRT
<213> Homo sapiens
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<400> 1090															
Met	Val	Thr	Trp	Val	Glu	Leu	Lys	Gly	Arg	Leu	Thr	Gln	Glu	Met	Ala
1				5					10					15	
Cys	Glu	Asp	Lys	Thr	Lys	Gly	Gly	Arg	Val	Gly	Gln	Arg	Gln	Tyr	Ile
			20					25					30		
Arg	Val	Val	Arg	Met	Gly	Leu	Gly	Glu	Glu	Ala	Leu	Pro	Leu	Phe	Phe
		35					40					45			
Phe	Asn	Leu	Ala	Lys	Gly	Leu	Leu	Gly	Gln	Gly	His	Pro	Ser	Leu	Leu
	50					55					60				
Leu	Gly	Ala	Ser	Ile	Phe	Leu	His	Ser	Val	Lys	Asn	Gly	Gly	Val	Ile
65					70					75					80
Gln	Lys	Tyr	Pro	Pro	Tyr	Cys	Gln	Gly	Phe	Gly	Glu	Gly	Ser	Lys	Lys

85  
Lys Leu Ala Trp Glu Asn Thr  
100

90

95

<210> 1091  
<211> 438  
<212> DNA  
<213> Homo sapiens

<400> 1091  
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gcgattatta cggttatat gaacgaagtg ttttggctc aagtaggtaa tgaggggctt  
120  
catggctttg ccgaggcgag tcagcacttt tttggacgac ctttaaaaga acttaatatc  
180  
gacgagtttg ccttgtagt aggaatggtg aaagggcctt ctatttataa tcctgaacga  
240  
caccctaaac gtgctttatc acgcagaaat acggtattag caattttaaa aagccaagat  
300  
cgtttaaccg agtcggatta taatatTTTA cggaacaac ccattcgctt ggcagataaa  
360  
caccaagaac gctcagtata tggggattat ttagatctag tctctatgca gttatcgcg  
420  
gactttgatc gctgcatg  
438

<210> 1092  
<211> 146  
<212> PRT  
<213> Homo sapiens

<400> 1092  
Thr Arg Lys Leu Thr Glu Val Val Met Ser Leu Leu Leu Glu Tyr His  
1 5 10 15  
Tyr Ser Lys Ser Ala Ile Ile Thr Ala Tyr Met Asn Glu Val Tyr Leu  
20 25 30  
Ala Gln Val Gly Asn Glu Gly Leu His Gly Phe Ala Glu Ala Ser Gln  
35 40 45  
His Phe Phe Gly Arg Pro Leu Lys Glu Leu Asn Ile Asp Glu Phe Ala  
50 55 60  
Leu Leu Val Gly Met Val Lys Gly Pro Ser Ile Tyr Asn Pro Glu Arg  
65 70 75 80  
His Pro Lys Arg Ala Leu Ser Arg Arg Asn Thr Val Leu Ala Ile Leu  
85 90 95  
Lys Ser Gln Asp Arg Leu Thr Glu Ser Asp Tyr Asn Ile Leu Arg Lys  
100 105 110  
Gln Pro Ile Arg Leu Ala Asp Lys His Gln Glu Arg Ser Val Tyr Gly  
115 120 125  
Asp Tyr Leu Asp Leu Val Ser Met Gln Leu Ser Arg Asp Phe Asp Arg  
130 135 140  
Cys Met  
145

<210> 1093  
 <211> 351  
 <212> DNA  
 <213> Homo sapiens

<400> 1093  
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 60  
 ggtcagctgc tgaacgacga gcagtacttc gaagcgctgg aagagttcgg cgacgatttc  
 120  
 gatgcccgc tgggtgccga agctgtccgt gaactgctgc acgctatoga cctggaacac  
 180  
 gagattggcc gtctgcgtga acaaattccg caaaccaact ccgaaaccaa gatcaagaag  
 240  
 ctgtccaagc gtctgaagtt gatggaagcc ttccaggggt ccggcaactt gccagagtgg  
 300  
 atgggtgctga ccggttctgcc ggttctgccg ccagatctgc gtccgctgggt a  
 351

<210> 1094  
 <211> 117  
 <212> PRT  
 <213> Homo sapiens

<400> 1094  
 Arg Val Leu Tyr Phe Glu Ser Tyr Val Val Ile Asp Pro Gly Met Thr  
 1 5 10 15  
 Thr Leu Glu Lys Gly Gln Leu Leu Asn Asp Glu Gln Tyr Phe Glu Ala  
 20 25 30  
 Leu Glu Glu Phe Gly Asp Asp Phe Asp Ala Arg Met Gly Ala Glu Ala  
 35 40 45  
 Val Arg Glu Leu Leu His Ala Ile Asp Leu Glu His Glu Ile Gly Arg  
 50 55 60  
 Leu Arg Glu Gln Ile Pro Gln Thr Asn Ser Glu Thr Lys Ile Lys Lys  
 65 70 75 80  
 Leu Ser Lys Arg Leu Lys Leu Met Glu Ala Phe Gln Gly Ser Gly Asn  
 85 90 95  
 Leu Pro Glu Trp Met Val Leu Thr Val Leu Pro Val Leu Pro Pro Asp  
 100 105 110  
 Leu Arg Pro Leu Val  
 115

<210> 1095  
 <211> 619  
 <212> DNA  
 <213> Homo sapiens

<400> 1095  
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 120  
 agccagcggc agatccgcgg ggagatcgac agcctgcgcc aggagaagga ctcaactgtc  
 180

aagcagcgcc tggagatcga cggcaagctg aggcagggga gtctgctgtc ccccgaggag  
240  
gagcggacgc tgttccagtt ggatgaggcc atcgaggccc tggatgctgc cattgagtat  
300  
aagaatgagg ccatcacatg ccgccagcgg gtgcttcggg cctcagcctc gttgctgtcc  
360  
cagtgcgaga tgaacctcat ggccaagctc agctacctct catcctcaga gaccagagcc  
420  
ctcctctgca agtattttga caaggtgggc cagcagccca tggccccccc agctcctcct  
480  
cacggcacgt gtggggaggt gtctcatggc agctgctcca gcggatatcc cgtttcctcc  
540  
cagactgggg gacagaatca ggaccaactc atctgcaggg ccgcttgacc ttaaagccta  
600  
ttttacttgt gaacctaag  
619

<210> 1096

<211> 195

<212> PRT

<213> Homo sapiens

<400> 1096

Xaa	Arg	Val	Arg	Ser	Ser	Gln	Ala	Leu	Asn	Glu	Asp	Ile	Val	Arg	Val
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Ser	Ser	Arg	Leu	Glu	His	Leu	Glu	Lys	Glu	Leu	Ser	Glu	Lys	Ser	Gly
			20					25					30		
Gln	Leu	Arg	Gln	Gly	Ser	Ala	Gln	Ser	Gln	Arg	Gln	Ile	Arg	Gly	Glu
			35				40					45			
Ile	Asp	Ser	Leu	Arg	Gln	Glu	Lys	Asp	Ser	Leu	Leu	Lys	Gln	Arg	Leu
	50					55				60					
Glu	Ile	Asp	Gly	Lys	Leu	Arg	Gln	Gly	Ser	Leu	Leu	Ser	Pro	Glu	Glu
65					70				75					80	
Glu	Arg	Thr	Leu	Phe	Gln	Leu	Asp	Glu	Ala	Ile	Glu	Ala	Leu	Asp	Ala
				85				90					95		
Ala	Ile	Glu	Tyr	Lys	Asn	Glu	Ala	Ile	Thr	Cys	Arg	Gln	Arg	Val	Leu
			100				105					110			
Arg	Ala	Ser	Ala	Ser	Leu	Leu	Ser	Gln	Cys	Glu	Met	Asn	Leu	Met	Ala
		115				120				125					
Lys	Leu	Ser	Tyr	Leu	Ser	Ser	Ser	Glu	Thr	Arg	Ala	Leu	Leu	Cys	Lys
	130					135				140					
Tyr	Phe	Asp	Lys	Val	Gly	Gln	Gln	Pro	Met	Ala	Pro	Pro	Ala	Pro	Pro
145					150				155					160	
His	Gly	Thr	Cys	Gly	Glu	Val	Ser	His	Gly	Ser	Cys	Ser	Ser	Gly	Tyr
				165				170						175	
Pro	Val	Ser	Ser	Gln	Thr	Gly	Gly	Gln	Asn	Gln	Asp	Gln	Leu	Ile	Cys
			180					185					190		
Arg	Ala	Ala													
			195												

<210> 1097

<211> 5108

<212> DNA

<213> Homo sapiens



&lt;400&gt; 1097

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120  
gacaaagagt tcacttccca tgagatcaaa caccctcaca gttcctgtgc tttcggcata  
180  
ggccagtagg gtacaatcgt aactccatgc taccctgtct cactgggggt tggggtcttt  
240  
cggaacttga cttttcccaa taatggatgt aaaatcatct tttgcagacc tgatttccac  
300  
aactgatct tgaacagcag ccaaaagctt tccattgctt gcaagtacca aatgccagtt  
360  
tatctgttta ttaaccaagc gaaccagtcc atcagggagc aaaaaagggt cggggtgta  
420  
ccagatgtat tggcgtaaaa ataataaacg atctcgaatt gctttcgtga tgataaagga  
480  
tgcacatgt ttttggttgc ctctaggctg tacttcagtc tccggtggcc actcgggtgt  
540  
gaccaacaag tcatagagaa tcgtctctc gactcctccg ctgcctgagt cctcggcgaa  
600  
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660  
acaaaaaaca tgggtgcatcc tttatcatca cgaaagcaat tcgagatcgt ttattatatt  
720  
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780  
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840  
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900  
gaaagaggat atgggtgataa gacagaggca accacaaagc ttcattgacat ggtagaccaa  
960  
ctggaacaaa ttctcagtgt gtcagagctt ttggaaaaac atggactcga gaaaccaatt  
1020  
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1080  
acgaggcaca ctggccggaa gcagcctcct gtcagtgagt ctattggag aacgttgctg  
1140  
caagacatgt taactatgca gcagaatgta tacacatgtc tagattctga tgctgctat  
1200  
gagatattta cagaaagcct tctgtgctct agtcgccttg aaaacatcca cctggctgga  
1260  
cagatgatgc actgcagtgc ttgttcagaa aatcctccag ctggtatagc ccataaaggg  
1320  
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1380  
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1620  
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1920  
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1980  
aatatcagtg cttcaccatt aactagtaaa gcagtacaag aggatgaagt aggtgttcca  
2040  
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2100  
aacaccacaa ccaccaccaa agcgggtgctg caggccgtca gtgatgggca gtggtggaag  
2160  
aagtctttta cttaccttcg accccttcag gggcaaaaat gtggtggtgc atatcaaac  
2220  
ggaactacag ccaatgaaga tctagagaaa caagggtgct atccttttta tgaatctgtc  
2280  
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2460  
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2580  
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2640  
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2700  
gcctggcctg aagaccttat ttcactgacc aagcagttac actgctacaa tgaacgtctc  
2760  
ctggatttca ctcaggcgca gatccttcag ggcccttcgga aggggtgtgga cgtgcagcgg  
2820  
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<210> 1098

<211> 1336

<212> PRT

<213> Homo sapiens

<400> 1098

Met	Val	Asp	Gln	Leu	Glu	Gln	Ile	Leu	Ser	Val	Ser	Glu	Leu	Leu	Glu
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Lys	His	Gly	Leu	Glu	Lys	Pro	Ile	Ser	Phe	Val	Lys	Asn	Thr	Gln	Ser
			20					25					30		
Ser	Ser	Glu	Glu	Ala	Arg	Lys	Leu	Met	Val	Arg	Leu	Thr	Arg	His	Thr
			35				40					45			
Gly	Arg	Lys	Gln	Pro	Pro	Val	Ser	Glu	Ser	His	Trp	Arg	Thr	Leu	Leu
			50				55				60				
Gln	Asp	Met	Leu	Thr	Met	Gln	Gln	Asn	Val	Tyr	Thr	Cys	Leu	Asp	Ser
65					70					75				80	
Asp	Ala	Cys	Tyr	Glu	Ile	Phe	Thr	Glu	Ser	Leu	Leu	Cys	Ser	Ser	Arg
				85					90					95	
Leu	Glu	Asn	Ile	His	Leu	Ala	Gly	Gln	Met	Met	His	Cys	Ser	Ala	Cys
			100					105					110		
Ser	Glu	Asn	Pro	Pro	Ala	Gly	Ile	Ala	His	Lys	Gly	Lys	Pro	His	Tyr
			115				120						125		
Arg	Val	Ser	Tyr	Glu	Lys	Ser	Ile	Asp	Leu	Val	Leu	Ala	Ala	Ser	Arg
			130				135					140			
Glu	Tyr	Phe	Asn	Ser	Ser	Thr	Asn	Leu	Thr	Asp	Ser	Cys	Met	Asp	Leu
145					150					155				160	
Ala	Arg	Cys	Cys	Leu	Gln	Leu	Ile	Thr	Asp	Arg	Pro	Pro	Ala	Ile	Gln
				165					170					175	
Glu	Glu	Leu	Asp	Leu	Ile	Gln	Ala	Val	Gly	Cys	Leu	Glu	Glu	Phe	Gly
			180					185					190		
Val	Lys	Ile	Leu	Pro	Leu	Gln	Val	Arg	Leu	Cys	Pro	Asp	Arg	Ile	Ser
			195				200					205			
Leu	Ile	Lys	Glu	Cys	Ile	Ser	Gln	Ser	Pro	Thr	Cys	Tyr	Lys	Gln	Ser
			210				215					220			
Thr	Lys	Leu	Leu	Gly	Leu	Ala	Glu	Leu	Leu	Arg	Val	Ala	Gly	Glu	Asn
225					230					235				240	
Pro	Glu	Glu	Arg	Arg	Gly	Gln	Val	Leu	Ile	Leu	Leu	Val	Glu	Gln	Ala
				245					250					255	
Leu	Arg	Phe	His	Asp	Tyr	Lys	Ala	Ala	Ser	Met	His	Cys	Gln	Glu	Leu
			260					265					270		
Met	Ala	Thr	Gly	Tyr	Pro	Lys	Ser	Trp	Asp	Val	Cys	Ser	Gln	Leu	Gly

1029

705		710		715		720
His Glu Arg Leu Gln Tyr Tyr Phe Thr Leu Leu Glu Asn Cys Gly Cys						
	725			730		735
Ala Asp Leu Gly Asn Cys Ala Ile Lys Pro Glu Thr His Ile Arg Leu						
	740			745		750
Leu Lys Lys Phe Lys Val Val Ala Ser Gly Leu Asn Tyr Lys Lys Leu						
	755			760		765
Thr Asp Glu Asn Met Ser Pro Leu Glu Ala Leu Glu Pro Val Leu Ser						
	770			775		780
Ser Gln Asn Ile Leu Ser Ile Ser Lys Leu Val Pro Lys Ile Pro Glu						
785		790		795		800
Lys Asp Gly Gln Met Leu Ser Pro Ser Ser Leu Tyr Thr Ile Trp Leu						
	805			810		815
Gln Lys Leu Phe Trp Thr Gly Asp Pro His Leu Ile Lys Gln Val Pro						
	820			825		830
Gly Ser Ser Pro Glu Trp Leu His Ala Tyr Asp Val Cys Met Lys Tyr						
	835			840		845
Phe Asp Arg Leu His Pro Gly Asp Leu Ile Thr Val Val Asp Ala Val						
	850			855		860
Thr Phe Ser Pro Lys Ala Val Thr Lys Leu Ser Val Glu Ala Arg Lys						
865		870		875		880
Glu Met Thr Arg Lys Ala Ile Lys Thr Val Lys His Phe Ile Glu Lys						
	885			890		895
Pro Arg Lys Arg Asn Ser Glu Asp Glu Ala Gln Glu Ala Lys Asp Ser						
	900			905		910
Lys Val Thr Tyr Ala Asp Thr Leu Asn His Leu Glu Lys Ser Leu Ala						
	915			920		925
His Leu Glu Thr Leu Ser His Ser Phe Ile Leu Ser Leu Lys Asn Ser						
	930			935		940
Glu Gln Glu Thr Leu Gln Lys Tyr Ser His Leu Tyr Asp Leu Ser Arg						
945		950		955		960
Ser Glu Lys Glu Lys Leu His Asp Glu Ala Val Ala Ile Cys Leu Asp						
	965			970		975
Gly Gln Pro Leu Ala Met Ile Gln Gln Leu Leu Glu Val Ala Val Gly						
	980			985		990
Pro Leu Asp Ile Ser Pro Lys Asp Ile Val Gln Ser Ala Ile Met Lys						
	995			1000		1005
Ile Ile Ser Ala Leu Ser Gly Gly Ser Ala Asp Leu Gly Gly Pro Arg						
	1010			1015		1020
Asp Pro Leu Lys Val Leu Glu Gly Val Val Ala Ala Val His Thr Ser						
1025		1030		1035		1040
Val Asp Lys Gly Glu Glu Leu Val Ser Pro Glu Asp Leu Leu Glu Trp						
	1045			1050		1055
Leu Arg Pro Phe Cys Ala Asp Asp Ala Trp Pro Val Arg Pro Arg Ile						
	1060			1065		1070
His Val Leu Gln Ile Leu Gly Gln Ser Phe His Leu Thr Glu Glu Asp						
	1075			1080		1085
Ser Lys Leu Leu Val Phe Phe Arg Thr Glu Ala Ile Leu Lys Ala Ser						
	1090			1095		1100
Trp Pro Gln Arg Gln Val Asp Ile Ala Asp Ile Glu Asn Glu Glu Asn						
1105		1110		1115		1120
Arg Tyr Cys Leu Phe Met Glu Leu Leu Glu Ser Ser His His Glu Ala						
	1125			1130		1135
Glu Phe Gln His Leu Val Leu Leu Leu Gln Ala Trp Pro Pro Met Lys						

```

1140      1145      1150
Ser Glu Tyr Val Ile Thr Asn Asn Pro Trp Val Arg Leu Ala Thr Val
1155      1160      1165
Met Leu Thr Arg Cys Thr Met Glu Asn Lys Glu Gly Leu Gly Asn Glu
1170      1175      1180
Val Leu Lys Met Cys Arg Ser Leu Tyr Asn Thr Lys Gln Met Leu Pro
1185      1190      1195      1200
Ala Glu Gly Val Lys Glu Leu Cys Leu Leu Leu Leu Asn Gln Ser Leu
1205      1210      1215
Leu Leu Pro Ser Leu Lys Leu Leu Leu Glu Ser Arg Asp Glu His Leu
1220      1225      1230
His Glu Met Ala Leu Glu Gln Ile Thr Ala Val Thr Thr Val Asn Asp
1235      1240      1245
Ser Asn Cys Asp Gln Glu Leu Leu Ser Leu Leu Leu Asp Ala Lys Leu
1250      1255      1260
Leu Val Lys Cys Val Ser Thr Pro Phe Tyr Pro Arg Ile Val Asp His
1265      1270      1275      1280
Leu Leu Ala Ser Leu Gln Gln Gly Arg Trp Asp Ala Glu Glu Leu Gly
1285      1290      1295
Arg His Leu Arg Glu Ala Gly His Glu Ala Glu Ala Gly Ser Leu Leu
1300      1305      1310
Leu Ala Val Arg Gly Thr His Gln Ala Phe Arg Thr Phe Ser Thr Ala
1315      1320      1325
Leu Arg Ala Ala Gln His Trp Val
1330      1335

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<210> 1099

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1099

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acgcgtgctc tctcccgtt ggcaatcagc atggcctttt cgagctcggc ggtgcgcaat
60

```

```

tgaaccattt cttccagttg cgatttttca gaaagcagcg tcgattgacc ttcggtcagc
120

```

```

ttgcgcacat agcgtttggt gcggctggca aggatatagg cgagtatcaa tgcacctgcg
180

```

```

agggcgagga tcgaggcaat ggtcagccag aagcgcaact tgtccatggc tatgttgcg
240

```

```

gcgattagcc gacgatcttc ttcacccagg aaactgttga tggttttcct gacgtcatcc
300

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atctggcca

309

<210> 1100

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1100

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Met Asp Asp Val Arg Lys Thr Ile Asn Ser Phe Leu Gly Glu Glu Asp
1      5      10      15

```

```

Arg Arg Leu Ile Ala Arg Asn Ile Ala Met Asp Lys Leu Arg Phe Trp

```

```

                20                25                30
Leu Thr Ile Ala Ser Ile Leu Ala Leu Ala Gly Ala Leu Ile Leu Ala
                35                40                45
Tyr Ile Leu Ala Ser Arg Thr Lys Arg Tyr Val Arg Lys Leu Thr Glu
                50                55                60
Gly Gln Ser Thr Leu Leu Ser Glu Lys Ser Gln Leu Glu Glu Met Val
65                70                75                80
Gln Leu Arg Thr Ala Glu Leu Glu Lys Ala Met Leu Ile Ala Lys Arg
                85                90                95
Glu Arg Ala Arg
                100

```

<210> 1101  
 <211> 540  
 <212> DNA  
 <213> Homo sapiens

<400> 1101  
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 120  
 ctcgacgaca ccgatcgca cctcgatcct gacgatctag tcatcgccga cgactcggga  
 180  
 gccattggcc tggttggcgt catgggtggt gcggccaccg aagtgactgc tgagacgacg  
 240  
 tcaatcatcc tcgagggcgc tcaattcgac ccgatgacgg gcgctcgtgc ttaccgacgc  
 300  
 cacaagctcg gttcggaggc ctcccgcgc tttgagcggg gcgttgatcc gatttgcgcc  
 360  
 cataccgcag ccgttcgcgc agcgggaattg ctgcccagt acggcgggtgc caccgtcggt  
 420  
 gagccaccg tcgttggtga ggtccccgag atgccacgtc aaacgatcaa cgctgattta  
 480  
 cctaaccgga ttctcggcac gaaggtgcc actgaagagg tcatcgagat cttgacgcgt  
 540

<210> 1102  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 1102  
 Val Asp Val Thr Asn Tyr Val Met Leu Glu Ser Gly Gln Pro Leu His  
 1 5 10 15  
 Ala Tyr Asp Ala Asp Asn Val Ser Gly Thr Ile Val Val Arg Lys Ala  
 20 25 30  
 His Glu Gly Glu His Leu Leu Thr Leu Asp Asp Thr Asp Arg Thr Leu  
 35 40 45  
 Asp Pro Asp Asp Leu Val Ile Ala Asp Asp Ser Gly Ala Ile Gly Leu  
 50 55 60  
 Ala Gly Val Met Gly Gly Ala Ala Thr Glu Val Thr Ala Glu Thr Thr  
 65 70 75 80  
 Ser Ile Ile Leu Glu Gly Ala His Phe Asp Pro Met Thr Gly Ala Arg



				85					90					95					
Ala	Tyr	Arg	Arg	His	Lys	Leu	Gly	Ser	Glu	Ala	Ser	Arg	Arg	Phe	Glu				
				100					105					110					
Arg	Gly	Val	Asp	Pro	Ile	Cys	Ala	His	Thr	Ala	Ala	Val	Arg	Ala	Ala				
				115					120					125					
Glu	Leu	Leu	Ala	Gln	Tyr	Gly	Gly	Ala	Thr	Val	Gly	Glu	Pro	Thr	Val				
				130					135					140					
Val	Gly	Glu	Val	Pro	Glu	Met	Pro	Arg	Gln	Thr	Ile	Asn	Ala	Asp	Leu				
				145					150					155					
Pro	Asn	Arg	Ile	Leu	Gly	Thr	Lys	Val	Pro	Thr	Glu	Glu	Val	Ile	Glu				
				165					170					175					
Ile	Leu	Thr	Arg																
				180															

&lt;210&gt; 1103

&lt;211&gt; 537

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1103

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cctttcctcc aaccaggcgc tgcggcgccg gcacttgccc gacgttataa aacaattcaa
60
cgtcaggttt accatcgctg tactcaacca aatggtagcc gtatccacct tccccaccga
120
tcgcgaccca ggtgatcttt ccctcggcat agattgacgt ggcattctcg tcggagtga
180
tcaagcagcg cttaggcagc tgctgggccc gcggttcgc ctagctcgcc ggagcacacg
240
aacccttccc gaagataacc gccaggcct ggcacacctt ctgctgcacc cattccggct
300
tgacgccgac cgccaccgca ctggtgaaca tagccgcaat aaggagaatt gcgatgtatt
360
ccggcgcggc ggcaccccga tcgtcccttg tccgcatggg tctccccctcc actacctacc
420
caatacaggg gagagcataa aaagaaaccc atagccgcac ctgagcccat ggccccaaac
480
cgggggcccaa gccgggccc aaccatggga tcaaccggat gtccgtacat cacgcgt
537

```

&lt;210&gt; 1104

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1104

Met	Tyr	Gly	His	Pro	Val	Asp	Pro	Met	Val	Trp	Ala	Arg	Leu	Gly	Pro				
1				5					10					15					
Arg	Phe	Gly	Ala	Met	Gly	Ser	Gly	Ala	Ala	Met	Gly	Phe	Phe	Leu	Cys				
				20				25					30						
Ser	Pro	Leu	Tyr	Trp	Val	Gly	Ser	Gly	Gly	Glu	Thr	His	Ala	Asp	Lys				
				35				40				45							
Gly	Arg	Ser	Gly	Cys	Arg	Arg	Ala	Gly	Ile	His	Arg	Asn	Ser	Pro	Tyr				
				50				55				60							
Cys	Gly	Tyr	Val	His	Gln	Cys	Gly	Gly	Gly	Arg	Arg	Gln	Ala	Gly	Met				

65		70		75		80									
Gly	Ala	Ala	Glu	Gly	Val	Pro	Gly	Leu	Gly	Gly	Tyr	Leu	Arg	Glu	Gly
		85		90		95									
Phe	Val	Cys	Ser	Gly	Glu	Leu	Gly	Glu	Ala	Ala	Gly	Pro	Ala	Ala	Ala
		100		105		110									

&lt;210&gt; 1105

&lt;211&gt; 448

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1105

```

agggacctgg ggcagcacgt gcacgtgggt gggaggctcc ttgctaccga cagccagcca
60
tggtgggtgggc ccttccgagg ctgcctccag gacctgogac tcgatggctg ccacctcccc
120
ttctttcctc tgccactgga taactcaagc cagcccagcg agctcggcgg caggcagtcc
180
tggaacctca ctgcggtgctg cgtctccgag gacatgtgca gtcctgaccc ctgtttcaat
240
ggtgggactt gcctcgtcac ctggaatgac ttccactgta cctgccctgc caatttcacg
300
gggcctacat gtgccagca gctgtggtgt cccggccagc cctgtctccc acctgccag
360
tgtgaggagg tccctgatgg ctttgtgtgt gtggcggagg ccacgttccg cgagggtccc
420
ccgcgcggt tcagcgggca caacgcgt
448

```

&lt;210&gt; 1106

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1106

Arg	Asp	Leu	Gly	Gln	His	Val	His	Val	Gly	Gly	Arg	Leu	Leu	Ala	Thr
1				5					10					15	
Asp	Ser	Gln	Pro	Trp	Gly	Gly	Pro	Phe	Arg	Gly	Cys	Leu	Gln	Asp	Leu
		20						25					30		
Arg	Leu	Asp	Gly	Cys	His	Leu	Pro	Phe	Phe	Pro	Leu	Pro	Leu	Asp	Asn
		35					40					45			
Ser	Ser	Gln	Pro	Ser	Glu	Leu	Gly	Gly	Arg	Gln	Ser	Trp	Asn	Leu	Thr
	50					55					60				
Ala	Gly	Cys	Val	Ser	Glu	Asp	Met	Cys	Ser	Pro	Asp	Pro	Cys	Phe	Asn
65					70				75					80	
Gly	Gly	Thr	Cys	Leu	Val	Thr	Trp	Asn	Asp	Phe	His	Cys	Thr	Cys	Pro
			85					90						95	
Ala	Asn	Phe	Thr	Gly	Pro	Thr	Cys	Ala	Gln	Gln	Leu	Trp	Cys	Pro	Gly
		100					105						110		
Gln	Pro	Cys	Leu	Pro	Pro	Ala	Thr	Cys	Glu	Glu	Val	Pro	Asp	Gly	Phe
	115					120						125			
Val	Cys	Val	Ala	Glu	Ala	Thr	Phe	Arg	Glu	Gly	Pro	Pro	Ala	Ala	Phe
	130					135					140				
Ser	Gly	His	Asn	Ala											

145

&lt;210&gt; 1107

&lt;211&gt; 618

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1107

```

acgcgttgat gaagtacctg ccacgcttca gcaatgacgg ctcggtgaac ggcttctata
60
tctttgttat cgatgagacc gaacgcaaac tcaccgaaga ggccctgcgc cacctcaacg
120
agaacctcga agagcgcgtc gccacgcgca cacaggcgct ggctgaagcc aaccaacgcc
180
tggcaaaaca aaatgttcaa acgcaagcgc gccgaagacg cgctgcgtca cgcgcagaaa
240
atggaagccg ggggccagct caccggcggc atcgcccatg atttcaacaa catgctgacc
300
gggattatcg gcagcctgga cttgatgcag cgctacatcn aggccggggc cagcgacgaa
360
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420
cggctgctgg cgttctcgcg ccgccagtcg ctggcccccc gcccgctgga cccaaccag
480
ctggtagcgt ccctggagga tctgttccag cgaaccaaag gcgcgcatat cacgctcaaa
540
gtgcaactgg gccgcgatat ctggcccgtg aataccgatg ccagccagtt ggaaaacgcc
600
ctgctcaacc tggcgatc
618

```

&lt;210&gt; 1108

&lt;211&gt; 182

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1108

```

Met Arg Pro Asn Ala Asn Ser Pro Lys Arg Pro Cys Ala Thr Ser Thr
1           5           10           15
Arg Thr Ser Lys Ser Ala Ser Pro Ser Ala His Arg Arg Trp Leu Lys
20           25           30
Pro Thr Asn Ala Trp Gln Asn Lys Met Phe Lys Arg Lys Arg Ala Glu
35           40           45
Asp Ala Leu Arg His Ala Gln Lys Met Glu Ala Gly Gly Gln Leu Thr
50           55           60
Gly Gly Ile Ala His Asp Phe Asn Asn Met Leu Thr Gly Ile Ile Gly
65           70           75           80
Ser Leu Asp Leu Met Gln Arg Tyr Ile Xaa Ala Gly Arg Ser Asp Glu
85           90           95
Ile Gly Arg Leu Thr Asp Ala Ala Val Ser Ser Ala His Arg Ala Ala
100          105          110
Ala Leu Thr His Arg Leu Leu Ala Phe Ser Arg Arg Gln Ser Leu Ala
115          120          125
Pro Arg Pro Leu Asp Pro Asn Gln Leu Val Ala Ser Leu Glu Asp Leu

```

130		135		140
Phe Gln Arg Thr Lys Gly Ala His Ile Thr Leu Lys Val Gln Leu Gly				
145		150		155
Arg Asp Ile Trp Pro Val Asn Thr Asp Ala Ser Gln Leu Glu Asn Ala				
	165		170	175
Leu Leu Asn Leu Ala Ile				
	180			

<210> 1109  
 <211> 325  
 <212> DNA  
 <213> Homo sapiens

<400> 1109  
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 60  
 agcctcaaga tcgtcgcacc gctggggggc atcctcgtgc ccttgatca ggtgcccgat  
 120  
 cccgttttcg ccagaagat ggtgggagac gggatctccc tggaccccat ctcaaacgaa  
 180  
 ttgctggcgc cggtcgccgg caccgtgacc cagctccaca acgcccacca cgcgctcacg  
 240  
 atcacgaccc cggaaggcat cgaggttctg gtccatatcg gactggatac cgtgatgctg  
 300  
 cgcggcgaca gctatccccc ccccn  
 325

<210> 1110  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<400> 1110  
 Thr Gly Glu His Gln Gly Gly Thr Met Gln Thr Thr Leu Pro Ser Ser  
 1 5 10 15  
 Leu Lys Pro Ser Ser Leu Lys Ile Val Ala Pro Leu Gly Gly Ile Leu  
 20 25 30  
 Val Pro Leu Asp Gln Val Pro Asp Pro Val Phe Ala Gln Lys Met Val  
 35 40 45  
 Gly Asp Gly Ile Ser Leu Asp Pro Ile Ser Asn Glu Leu Leu Ala Pro  
 50 55 60  
 Val Ala Gly Thr Val Thr Gln Leu His Asn Ala His His Ala Leu Thr  
 65 70 75 80  
 Ile Thr Thr Pro Glu Gly Ile Glu Val Leu Val His Ile Gly Leu Asp  
 85 90 95  
 Thr Val Met Leu Arg Gly Asp Ser Tyr Pro Pro Pro  
 100 105

<210> 1111  
 <211> 385  
 <212> DNA  
 <213> Homo sapiens

<400> 1111

nnacgcgtcg ccccggtgcg cctggcagtg ggagaagagc atgaccttac cgagctcgcg  
 60  
 actgaactcg tcaacgccgc ctatagccgg gttgacatgg tggaacgccg tggcgaattc  
 120  
 gcagtacgtg gcggcacgtg cgacgtcttc ccaccggtgc tagaacaccc ggtccgtatc  
 180  
 gatttttttg gtgacgagat cgaggaaatg acctccttcg cggtagccga ccagcgatcc  
 240  
 accgacgaga ctcaccaaga actgatctgc gctccttgcc gtgagctcat cctcaccgac  
 300  
 gaggtacgtt cccgagccaa ggctttgctg accgaccatc ccgaattagc tgacatgttg  
 360  
 gagcggtatcg gcaacgggtca agctt  
 385

<210> 1112  
 <211> 128  
 <212> PRT  
 <213> Homo sapiens

<400> 1112  
 Xaa Arg Val Ala Pro Val Arg Leu Ala Val Gly Glu Glu His Asp Leu  
 1 5 10 15  
 Thr Glu Leu Ala Thr Glu Leu Val Asn Ala Ala Tyr Ser Arg Val Asp  
 20 25 30  
 Met Val Glu Arg Arg Gly Glu Phe Ala Val Arg Gly Gly Ile Val Asp  
 35 40 45  
 Val Phe Pro Pro Val Leu Glu His Pro Val Arg Ile Asp Phe Phe Gly  
 50 55 60  
 Asp Glu Ile Glu Glu Met Thr Ser Phe Ala Val Ala Asp Gln Arg Ser  
 65 70 75 80  
 Thr Asp Glu Thr His Gln Glu Leu Ile Cys Ala Pro Cys Arg Glu Leu  
 85 90 95  
 Ile Leu Thr Asp Glu Val Arg Ser Arg Ala Lys Ala Leu Leu Thr Asp  
 100 105 110  
 His Pro Glu Leu Ala Asp Met Leu Glu Arg Ile Gly Asn Gly Gln Ala  
 115 120 125

<210> 1113  
 <211> 400  
 <212> DNA  
 <213> Homo sapiens

<400> 1113  
 nnncgaccga tgagcgatcg cgaaccgctc aacctgggat acccctacgt cgagtctttc  
 60  
 cactcggact tctcggggac cggcggagtc gatcagaccg accgttctac caatatcgac  
 120  
 gagcacacca tcgaggagat gcatcagatc goctcgcgtt accccgactc ccgttcggcg  
 180  
 ttgctgccga tctgcacct ggttcagtcg gtggacggac gcatctcgcc ggtcgggtatt  
 240  
 gagactgcgg ctgaagtgct cggcattacc accgcccagg tatccgggggt ggcgaccttc  
 300

tacaccatgt ataagaagca ccctgcgggc cagcatcaca tcggtgtctg caccacggcg  
 360  
 ctgtgcgccg tcatgggtgg cgaggaggtg cttgcccgtg  
 400

<210> 1114  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 1114  
 Xaa Arg Pro Met Ser Asp Arg Glu Pro Val Asn Leu Gly Tyr Pro Tyr  
 1 5 10 15  
 Val Glu Ser Phe His Ser Asp Phe Ser Gly Thr Gly Gly Val Asp Gln  
 20 25 30  
 Thr Asp Arg Ser Thr Asn Ile Asp Glu His Thr Ile Glu Glu Met His  
 35 40 45  
 Gln Ile Ala Ser Arg Tyr Pro Asp Ser Arg Ser Ala Leu Leu Pro Ile  
 50 55 60  
 Leu His Leu Val Gln Ser Val Asp Gly Arg Ile Ser Pro Val Gly Ile  
 65 70 75 80  
 Glu Thr Ala Ala Glu Val Leu Gly Ile Thr Thr Ala Gln Val Ser Gly  
 85 90 95  
 Val Ala Thr Phe Tyr Thr Met Tyr Lys Lys His Pro Ala Gly Gln His  
 100 105 110  
 His Ile Gly Val Cys Thr Thr Ala Leu Cys Ala Val Met Gly Gly Glu  
 115 120 125  
 Glu Val Leu Ala Arg  
 130

<210> 1115  
 <211> 402  
 <212> DNA  
 <213> Homo sapiens

<400> 1115  
 tctccgactg cacagattag agaaaggact gcgatgacca ttcgcaccac tcatgttggg  
 60  
 tccctgcccc gcacccccga gctgatcgag gcgaatcgtg cgcgccgtga gggttcgctc  
 120  
 ggcgaggctg acttcacgtc gctgctgcag gatcagggtg acggcgttgt gaagcgtcag  
 180  
 gctgagattg gcctggatat cgtcaatgac ggcgagtacg gtcacgcgat gcttgacacg  
 240  
 gttgattacg gcgcgtgggtg gacgtattcc atctctcgtt tcggcgggct gtcctttgag  
 300  
 gacgtgcagc gttttgatgt gcgtcccccg gctggccgtg acggtcgcct gtctttctcg  
 360  
 tcgttcgctg agcgcgcga ctggcagcgt ttccggacgc gt  
 402

<210> 1116  
 <211> 134  
 <212> PRT

<213> Homo sapiens

<400> 1116

```

Ser Pro Thr Ala Gln Ile Arg Glu Arg Thr Ala Met Thr Ile Arg Thr
 1           5           10           15
Thr His Val Gly Ser Leu Pro Arg Thr Pro Glu Leu Ile Glu Ala Asn
          20           25           30
Arg Ala Arg Arg Glu Gly Ser Leu Gly Glu Ala Asp Phe Thr Ser Leu
          35           40           45
Leu Gln Asp Gln Val Asp Gly Val Val Lys Arg Gln Ala Glu Ile Gly
          50           55           60
Leu Asp Ile Val Asn Asp Gly Glu Tyr Gly His Ala Met Leu Asp Thr
65           70           75           80
Val Asp Tyr Gly Ala Trp Trp Thr Tyr Ser Ile Ser Arg Phe Gly Gly
          85           90           95
Leu Ser Phe Glu Asp Val Gln Arg Phe Asp Val Arg Pro Pro Ala Gly
          100          105          110
Arg Asp Gly Arg Leu Ser Phe Ser Ser Phe Ala Glu Arg Arg Asp Trp
          115          120          125
Gln Arg Phe Arg Thr Arg
          130

```

<210> 1117

<211> 307

<212> DNA

<213> Homo sapiens

<400> 1117

```

ggcgccgggtc ttgccctggc tggaagtggc atgcagacct tgggtgcggaa cccgctggct
60
gaccctacc tgctaggtgt atcggtctggc gcaagtgtgg gagcaaccgc agtcctcgct
120
ttgggggatgt tcacttcgtg gggaactcac cgactcactc ttggtgccct ttagggggcc
180
ttggcggcag ctgcattggt ctatctcatt tccatggcgc aaggaggcat gacgccgctt
240
cggttggtgc tgcgggcgt ggtgtgtcc tcggcgttct cgcgttggcg agtttctcg
300
tctttcg
307

```

<210> 1118

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1118

```

Gly Ala Gly Leu Ala Leu Ala Gly Ser Gly Met Gln Thr Leu Val Arg
 1           5           10           15
Asn Pro Leu Ala Asp Pro Tyr Leu Leu Gly Val Ser Ala Gly Ala Ser
          20           25           30
Val Gly Ala Thr Ala Val Ile Ala Leu Gly Met Phe Thr Ser Trp Gly
          35           40           45
Thr His Arg Leu Thr Leu Gly Ala Leu Val Gly Ala Leu Ala Ala Ala

```

50	55	60
Ala Leu Val Tyr Leu Ile Ser Met Ala Gln Gly Gly Met Thr Pro Leu		
65	70	75
Arg Leu Val Leu Ser Gly Val Val Leu Ser Ser Ala Phe Ser Arg Trp		80
	85	90
Arg Val Ser Ser Ser Phe		95
100		

<210> 1119  
 <211> 353  
 <212> DNA  
 <213> Homo sapiens

<400> 1119  
 cgcgctccttg agatgcttga gcaggctcggg attgaggatc cagccagggt gatggattcc  
 60  
 tatccgcatac aactgtccgg tggccagcgt caacgggttc tgettgcctat ggcgttggtg  
 120  
 aactcgccgg atctgctcat ttgtgacgag ccgacgaccg ccttggaagt cacgggtgcag  
 180  
 tctcaggtac tggcgactat cgatgagggtg cttgactcgg ttggtgccgc atgcctattt  
 240  
 attacccacg atttggcggg tgtctcgac atctgccggg agcttatcgt gatgacgtcg  
 300  
 ggcaagggtcg ttgaagccgg atcagcgcgt gatgtgttat ctcaccctga tca  
 353

<210> 1120  
 <211> 117  
 <212> PRT  
 <213> Homo sapiens

<400> 1120  
 Arg Val Leu Glu Met Leu Glu Gln Val Gly Ile Glu Asp Pro Ala Arg  
 1 5 10 15  
 Val Met Asp Ser Tyr Pro His Gln Leu Ser Gly Gly Gln Arg Gln Arg  
 20 25 30  
 Val Leu Leu Ala Met Ala Leu Val Asn Ser Pro Asp Leu Leu Ile Cys  
 35 40 45  
 Asp Glu Pro Thr Thr Ala Leu Asp Val Thr Val Gln Ser Gln Val Leu  
 50 55 60  
 Ala Thr Ile Asp Glu Val Leu Asp Ser Val Gly Ala Ala Cys Leu Phe  
 65 70 75 80  
 Ile Thr His Asp Leu Ala Val Val Ser His Ile Cys Arg Glu Leu Ile  
 85 90 95  
 Val Met Thr Ser Gly Lys Val Val Glu Ala Gly Ser Ala Arg Asp Val  
 100 105 110  
 Leu Ser His Pro Asp  
 115

<210> 1121  
 <211> 406  
 <212> DNA  
 <213> Homo sapiens



&lt;400&gt; 1121

tgatcaccca tgctccactc gaccgcgcgc tcgacgatgc gacggctgag acgatgctcg  
60  
cccagggcac ggtgttcac cgcaccttga cgatgatgaa aggcgtcgcc gcgaatctca  
120  
ccgcagcggg cgttcccggg gtgagctatg cacacgcca cgagagcacg cgcgcgatgc  
180  
atgccgcggg cgttccgggc ctggccggca ccgacgccta catcgggtcc ttcacacggg  
240  
catcgccgcc atacggcgag agcatgcacg acgaagacgc ctacatcggg ctctcgaac  
300  
gggcaatgcc gccatacggc gagagcatgc acgacgaact cgctctgctc gtggacgccg  
360  
gcctgtcaac agccgaagcg ctgcgcgctg ccacctcgac gggcgc  
406

&lt;210&gt; 1122

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1122

Met	Leu	Ala	Gln	Gly	Thr	Val	Phe	Ile	Pro	Thr	Leu	Thr	Met	Met	Lys
1				5					10					15	
Gly	Val	Ala	Ala	Asn	Leu	Thr	Ala	Ala	Gly	Val	Pro	Gly	Val	Ser	Tyr
			20					25					30		
Ala	His	Ala	His	Glu	Ser	Thr	Arg	Ala	Met	His	Ala	Ala	Gly	Val	Pro
			35				40					45			
Val	Leu	Ala	Gly	Thr	Asp	Ala	Tyr	Ile	Gly	Ser	Phe	Thr	Arg	Ala	Ser
	50				55					60					
Pro	Pro	Tyr	Gly	Glu	Ser	Met	His	Asp	Glu	Asp	Ala	Tyr	Ile	Gly	Leu
65				70					75					80	
Leu	Glu	Arg	Ala	Met	Pro	Pro	Tyr	Gly	Glu	Ser	Met	His	Asp	Glu	Leu
			85					90					95		
Ala	Leu	Leu	Val	Asp	Ala	Gly	Leu	Ser	Thr	Ala	Glu	Ala	Leu	Arg	Ala
			100				105						110		
Ala	Thr	Ser	Thr	Gly											
			115												

&lt;210&gt; 1123

&lt;211&gt; 337

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1123

gccggcgatg cgttcattaa ggctaagat gcgcgcacgc cccccgctt tctcgcctt  
60  
cgctccacc gcccttgccg cagcggggat ggtgggggtgc tcgtccgagg gggcatcgcc  
120  
aagcgaatgc tcccctggtg atattgccgc agtgcgcgag gccctgccgc attcgtcgc  
180  
taaggcgaag ctgacccgc actccaccaa cgaggatgaa cactcctttt ccattgctcta  
240

ccgcgcgcaa gataaggagc aggtcagctt gctggggacg aagtatgagg ccgacgggtgc  
 300  
 acccgtctgc cccgatgacc ccaatgaggc agcgcgc  
 337

<210> 1124  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 1124  
 Met Arg Ser Leu Arg Pro Lys Met Arg Arg Arg Leu Pro Ala Phe Leu  
 1 5 10 15  
 Ala Leu Ala Ser Thr Ala Leu Ala Ala Ala Gly Met Val Gly Cys Ser  
 20 25 30  
 Ser Glu Gly Ala Ser Pro Ser Glu Cys Ser Pro Val Asp Ile Ala Ala  
 35 40 45  
 Val Arg Glu Ala Leu Pro His Ser Leu Ala Lys Ala Lys Leu Asp Pro  
 50 55 60  
 His Ser Thr Asn Glu Asp Glu His Ser Phe Ser Met Leu Tyr Arg Ala  
 65 70 75 80  
 Gln Asp Lys Glu Gln Val Ser Leu Leu Gly Thr Lys Tyr Glu Ala Asp  
 85 90 95  
 Gly Ala Pro Val Cys Pro Asp Asp Pro Asn Glu Ala Ala Arg  
 100 105 110

<210> 1125  
 <211> 555  
 <212> DNA  
 <213> Homo sapiens

<400> 1125  
 nncttgaatc gaatcggcat tgcgtctaaa catgacgttg agacactctc tgctaagctc  
 60  
 gaagagctga cggcattgct agaacgtgtc gcgcgtaaac actaaggaga catcgggatg  
 120  
 gctgttaaaa agactactca gaaagaaggc agctcgtgga tcggggaagt tgaaaaatat  
 180  
 tcccgtaaaa tctggcttgc tggtttaggc gtgtactcga aggttagcag tgacggcggc  
 240  
 aaatacttcg agacgttggt caaggacggc gagaaggccg agaagttgac caagagccca  
 300  
 gtcggtaaaa aagtagaggc ggcaaaagcg agcgccggtt ctgcgaaatc gagcatttcg  
 360  
 gatacctggg gcaagttgga agagactttc gacaagcgtc tcaacagtgc tatttcgcga  
 420  
 ttgggcgtgc ccagcaaagc ggaactgaag acgctgcaca gcaaggctga taccctgacc  
 480  
 aagcaaatcg aaaaactcac cggtgccaaa gtggccccgg ctaaaacggc agccgctaaa  
 540  
 cctgctgcca agctt  
 555

<210> 1126

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1126

```

Met Ala Val Lys Lys Thr Thr Gln Lys Glu Gly Ser Ser Trp Ile Gly
 1           5           10          15
Glu Val Glu Lys Tyr Ser Arg Lys Ile Trp Leu Ala Gly Leu Gly Val
          20          25          30
Tyr Ser Lys Val Ser Ser Asp Gly Gly Lys Tyr Phe Glu Thr Leu Val
          35          40          45
Lys Asp Gly Glu Lys Ala Glu Lys Leu Thr Lys Ser Pro Val Gly Lys
          50          55          60
Lys Val Glu Ala Ala Lys Ala Ser Ala Gly Ser Ala Lys Ser Ser Ile
65          70          75          80
Ser Asp Thr Trp Gly Lys Leu Glu Glu Thr Phe Asp Lys Arg Leu Asn
          85          90          95
Ser Ala Ile Ser Arg Leu Gly Val Pro Ser Lys Ala Glu Leu Lys Thr
          100         105         110
Leu His Ser Lys Val Asp Thr Leu Thr Lys Gln Ile Glu Lys Leu Thr
          115         120         125
Gly Ala Lys Val Ala Pro Ala Lys Thr Ala Ala Ala Lys Pro Ala Ala
          130         135         140
Lys Leu
145

```

&lt;210&gt; 1127

&lt;211&gt; 352

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1127

```

cccgaccgcg tactcgtggt cggtgccgga gtgatgggtg cagcacacgc acacgcgctc
60
cgcggggtccc tccaggcagt cgtgtgcggc gtggtcgacc tgcaggagcg agcagcgcaa
120
tcactcgctt cggaagtggg cgtacccggg ttcaccgacc tggatgaaggc gatcgagtcg
180
accgctccgg acgccgcggt catcgccacg ccggactcgg ctcaccgcca accggctgag
240
accgccatcg acgccggcct tgccgtcctg gtcgagaaac cgctcgccac gaccgtcgat
300
gacgccgaag cgatcgtgct ccgcgctgaa cgggccggcg tccgtctcat ga
352

```

&lt;210&gt; 1128

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1128

```

Pro Asp Arg Val Leu Val Val Gly Ala Gly Val Met Gly Ala Ala His
 1           5           10          15
Ala His Ala Leu Arg Gly Ser Leu Gln Ala Val Val Cys Gly Val Val

```

```

          20          25          30
Asp Leu Gln Glu Arg Ala Ala Gln Ser Leu Ala Ser Glu Val Gly Val
          35          40          45
Pro Gly Phe Thr Asp Leu Val Lys Ala Ile Glu Ser Thr Ala Pro Asp
          50          55          60
Ala Ala Val Ile Ala Thr Pro Asp Ser Ala His Arg Gln Pro Ala Glu
65          70          75          80
Thr Ala Ile Asp Ala Gly Leu Ala Val Leu Val Glu Lys Pro Leu Ala
          85          90          95
Thr Thr Val Asp Asp Ala Glu Ala Ile Val Leu Arg Ala Glu Arg Ala
          100          105          110
Gly Val Arg Leu Met
          115

```

&lt;210&gt; 1129

&lt;211&gt; 336

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1129

```

ntggcagccc tggaggagcc gatggtggac ctggacggcg agctgccttt cgtgcggccc
60
ctgccccaca ttgccgtgct ccaggacgag ctgccgcaac tcttcagga tgacgacgtc
120
ggggccgatg aggaagaggg agagttgcgg ggcgaaacaca cgctcacaga gaagtttgtc
180
tgcttggtatg actccttttg ccatgactgc agcttgacct gtgatgactg caggaacgga
240
gggacctgcc tcctgggcct ggatggctgg gattgccccg agggctggac tgggctcatc
300
tgcaatgaga cttggtcctc gggctgcatg gatatt
336

```

&lt;210&gt; 1130

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1130

```

Xaa Ala Ala Leu Glu Glu Pro Met Val Asp Leu Asp Gly Glu Leu Pro
1          5          10          15
Phe Val Arg Pro Leu Pro His Ile Ala Val Leu Gln Asp Glu Leu Pro
          20          25          30
Gln Leu Phe Gln Asp Asp Asp Val Gly Ala Asp Glu Glu Glu Ala Glu
          35          40          45
Leu Arg Gly Glu His Thr Leu Thr Glu Lys Phe Val Cys Leu Asp Asp
          50          55          60
Ser Phe Gly His Asp Cys Ser Leu Thr Cys Asp Asp Cys Arg Asn Gly
65          70          75          80
Gly Thr Cys Leu Leu Gly Leu Asp Gly Trp Asp Cys Pro Glu Gly Trp
          85          90          95
Thr Gly Leu Ile Cys Asn Glu Thr Trp Ser Ser Gly Cys Met Asp Ile
          100          105          110

```

<210> 1131  
 <211> 672  
 <212> DNA  
 <213> Homo sapiens

<400> 1131  
 gcgttggtgg tgctcatggc ccgggaaaat ccgctggatc aatacctctt tgagcacccc  
 60  
 gaattattgt tctcgtcctc ggtggaatcg actgtgttgc acccggataa cccgtatgtg  
 120  
 ctcggccccg acgtggccgc ggccgccag gaggcatacc tctcccctgc ggacgaagag  
 180  
 ttttacgggt cggcctttgc cgggatatgc aaaacgctga caggccagaa cgtactgcga  
 240  
 cgtcgcggaa atcggctgtt ctggactcgt ccggaacggg ctgtcgacgc catcgacctg  
 300  
 cgatcggcgg caggcaaagg gattgacatt atcgacgtgt ccaccgggag ggtcatcggg  
 360  
 gtatcgacg aagccgccgc agaccgtacc gtgcatccag gcgcggtgta cctgcatcag  
 420  
 ggggatcagt ggctggtcga cgaatacaac ccggtcgagc accacgccct ggtgcaccag  
 480  
 gacctgccgg gatattggac tcaaccgcag tcagcgtcga cggtgagaat ccttcgggag  
 540  
 gagagacgtc gcgcttgtgg tcccggatat gtggcgtgcg ggcaggtgga actgacagag  
 600  
 caagttgttg ggtatctgcg tcgcgacgaa ttcaccaatg atgtgtggta ctcgctggcc  
 660  
 ctcgagatgc cc  
 672

<210> 1132  
 <211> 224  
 <212> PRT  
 <213> Homo sapiens

<400> 1132  
 Ala Leu Val Val Leu Met Ala Arg Glu Asn Pro Leu Asp Gln Tyr Leu  
 1 5 10 15  
 Phe Glu His Pro Glu Leu Leu Phe Ser Ser Ser Val Glu Ser Thr Val  
 20 25 30  
 Leu His Pro Asp Asn Pro Tyr Val Leu Gly Pro His Val Ala Ala Ala  
 35 40 45  
 Ala Gln Glu Ala Tyr Leu Ser Pro Ala Asp Glu Glu Phe Tyr Gly Ser  
 50 55 60  
 Ala Phe Ala Gly Ile Cys Lys Thr Leu Thr Gly Gln Asn Val Leu Arg  
 65 70 75 80  
 Arg Arg Gly Asn Arg Leu Phe Trp Thr Arg Pro Glu Arg Ala Val Asp  
 85 90 95  
 Ala Ile Asp Leu Arg Ser Ala Ala Gly Lys Gly Ile Asp Ile Ile Asp  
 100 105 110  
 Val Ser Thr Gly Arg Val Ile Gly Val Val Asp Glu Ala Ala Ala Asp  
 115 120 125  
 Arg Thr Val His Pro Gly Ala Val Tyr Leu His Gln Gly Asp Gln Trp

130	135	140
Leu Val Asp Glu Tyr Asn Pro Val Glu His His Ala Leu Val His Gln		
145	150	155
Asp Leu Pro Gly Tyr Trp Thr Gln Pro Gln Ser Ala Ser Thr Val Arg		
	165	170
Ile Leu Arg Glu Glu Arg Arg Arg Ala Cys Gly Pro Gly Tyr Val Ala		
	180	185
Cys Gly Gln Val Glu Leu Thr Glu Gln Val Val Gly Tyr Leu Arg Arg		
	195	200
Asp Glu Phe Thr Asn Asp Val Trp Tyr Ser Leu Ala Leu Glu Met Pro		
210	215	220

&lt;210&gt; 1133

&lt;211&gt; 796

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1133

```

acgcgtgaag gggggtccag cgggtgtggc actcgatgac aagacagttt gagagcggct
60
tgtctccggg gacctggcgt aggtctcttc tgccttaacc cttggctttt gcacttcctc
120
tgtctgtcct ccatacaagc ttcttgcccc tagggaggac gggcttctta acagggggag
180
ccggttcttg tcctaacccc actggcatct tacactctgg gagatagctt cccctgaga
240
ggcgagtgag ccacgtaagg ggaggtgggc gatggcttcc cttctgtctt gggttggggg
300
agtcaggtac agtatttttt cttttaaaagc atcattgatc acataataag gtttgtcata
360
gtccttaatc acagacctgt gaaatttgga gaattcacgg cacctaggat gggagtgagc
420
ttctgattgt gagctgattt gggagctaac ctcaaggaaa ctctcttgc aagccccctg
480
ctgggtgtcg gggccttcgc caggacctc ccggggactc tggacgctct ttgtctgccc
540
ttccttttcc ctcacctgc tccccgtga gaaagtggg ctcatgcagc tcagctcagt
600
gacagagggg ttattagggg tagctctggg acccatcttt tggtgatttc ttctctctct
660
ttctctaata gaataattgt ttctgtctac acttctttat tttctcctct ctacagctgc
720
cttctaataa tgtgcttttc tgttcttgca gaactgaagc ttgcatggcc tttgttgtga
780
ctttcccttc acgcgt
796

```

&lt;210&gt; 1134

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1134

Met Gly Pro Arg Ala Thr Pro Asn Lys Pro Ser Val Thr Glu Leu Ser

```

      1           5           10           15
Cys Met Ser Pro Thr Phe Ser Arg Gly Ser Glu Val Arg Glu Lys Glu
      20           25           30
Gly Gln Thr Lys Ser Val Gln Ser Pro Arg Glu Val Pro Gly Glu Gly
      35           40           45
Pro Asp Thr Gln Gln Gly Ala Cys Lys Arg Ser Phe Leu Glu Val Ser
      50           55           60
Ser Gln Ile Ser Ser Gln Ser Glu Ala His Ser His Pro Arg Cys Arg
      65           70           75           80
Glu Phe Ser Lys Phe His Arg Ser Val Ile Lys Asp Tyr Asp Lys Pro
      85           90           95
Tyr Tyr Val Ile Asn Asp Ala Leu Lys Glu Lys Ile Leu Tyr Leu Thr
      100           105           110
Pro Pro Thr Gln Asp Arg Arg Glu Ala Ile Ala His Leu Pro Leu Arg
      115           120           125
Gly Ser Leu Ala Ser Gln Gly Glu Ala Ile Ser Gln Ser Val Arg Cys
      130           135           140
Gln Trp Gly
145

```

&lt;210&gt; 1135

&lt;211&gt; 376

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1135

```

gatcaggcca cacaggacaa cttcgagaag ggctccatct tcccaccctt caccagcatc
60
agaaagatct ctgcgcacat cgctgcagcc gtggctgcaa aagcctacga gctcgggtctg
120
gcgacccgtc tgctccccc cagcgacctg gtgaaatatg cagagaactg catgtacact
180
cccgtctacc gcaactaccg gtagtgctgc ggggatcaat tttgcagtaa taaaaaatct
240
actatcaacg cggatgggtac tctgttgttt atagtccttg ctgctaacca cccttgttgc
300
tggtgctgct ggagaggcat tgtacctgtc catgcatata tgatatatat atgttgtaac
360
gttgtgaaag caaact
376

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&lt;210&gt; 1136

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1136

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Asp Gln Ala Thr Gln Asp Asn Phe Glu Lys Gly Ser Ile Phe Pro Pro
      1           5           10           15
Phe Thr Ser Ile Arg Lys Ile Ser Ala His Ile Ala Ala Val Ala
      20           25           30
Ala Lys Ala Tyr Glu Leu Gly Leu Ala Thr Arg Leu Pro Pro Pro Ser
      35           40           45
Asp Leu Val Lys Tyr Ala Glu Asn Cys Met Tyr Thr Pro Val Tyr Arg

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50  
Asn Tyr Arg  
65

55

60

<210> 1137  
<211> 357  
<212> DNA  
<213> Homo sapiens

<400> 1137  
acgcgtcgct ggaacccgaa gatgaagcgc ttcattcttca ccgagcgcaa cggatatctac  
60  
atcattgacc tgcaccagtc gctgacctac attgataagg cgtacgcctt cgtcaaggag  
120  
actgtcgcca agggcggcca gattcttttc gtcggcacga agaagcaggc ccaggagtcc  
180  
atcggtgagc agggcactcg cgttggcatg ccctatgtca accagcgttg gcttggggga  
240  
atgctcacta atttccagac catctcgaag cgcattgccc ggctcaagga gctcgaggcc  
300  
atggactttg acaaggtttc cggctccggt ctcaccaaga aggagctgct tatgctc  
357

<210> 1138  
<211> 119  
<212> PRT  
<213> Homo sapiens

<400> 1138  
Thr Arg Arg Trp Asn Pro Lys Met Lys Arg Phe Ile Phe Thr Glu Arg  
1 5 10 15  
Asn Gly Ile Tyr Ile Ile Asp Leu His Gln Ser Leu Thr Tyr Ile Asp  
20 25 30  
Lys Ala Tyr Ala Phe Val Lys Glu Thr Val Ala Lys Gly Gly Gln Ile  
35 40 45  
Leu Phe Val Gly Thr Lys Lys Gln Ala Gln Glu Ser Ile Val Glu Gln  
50 55 60  
Ala Thr Arg Val Gly Met Pro Tyr Val Asn Gln Arg Trp Leu Gly Gly  
65 70 75 80  
Met Leu Thr Asn Phe Gln Thr Ile Ser Lys Arg Ile Ala Arg Leu Lys  
85 90 95  
Glu Leu Glu Ala Met Asp Phe Asp Lys Val Ser Gly Ser Gly Leu Thr  
100 105 110  
Lys Lys Glu Leu Leu Met Leu  
115

<210> 1139  
<211> 456  
<212> DNA  
<213> Homo sapiens

<400> 1139  
gtgcacaggc cgtctgaggc catgccgcgg acgatcgatc cgagtatggc ggcaccttca  
60



ccaatcccgt aggacccgtc tcgtccagca tcgaccaagg cgctgttgag gcgttcggct  
 120  
 tcggtaatga actcgatgcg ctcaatatcc acgggggtag cgaaatcgta gatcttggcc  
 180  
 agactgaggc cttggaggag cgcggccgtc ggggggacgt ggctgcggc cgggcgttcc  
 240  
 ttgctctcaa ggacttcgtc gtcgcggtg acaaggaata cgtttgtgtg gtcgcctgca  
 300  
 atgcatgctc gagcgtggtg accatcgagg tgaaggacgg ttccggcata gaggtcatcg  
 360  
 tccacatcgg ccacagttag ttcgacgact cctgagtcga ctagatgacg cgccttctct  
 420  
 gccgcgtctt cgctgacgtc ggccaggacc gctagc  
 456

<210> 1140  
 <211> 122  
 <212> PRT  
 <213> Homo sapiens

<400> 1140  
 Met Trp Thr Met Thr Ser Met Pro Lys Pro Ser Phe Thr Ser Met Val  
 1 5 10 15  
 Thr Thr Leu Glu His Ala Leu Gln Ala Thr Thr Gln Thr Tyr Ser Leu  
 20 25 30  
 Ser Ala Ala Thr Thr Lys Ser Leu Arg Ala Arg Asn Ala Arg Pro Gln  
 35 40 45  
 Ala Thr Ser Pro Arg Arg Pro Arg Ser Ser Lys Ala Ser Val Trp Pro  
 50 55 60  
 Arg Ser Thr Ile Ser Leu Pro Pro Trp Ile Leu Ser Ala Ser Ser Ser  
 65 70 75 80  
 Leu Pro Lys Pro Asn Ala Ser Thr Ala Pro Trp Ser Met Leu Asp Glu  
 85 90 95  
 Thr Gly Pro Thr Gly Leu Val Lys Val Pro Pro Tyr Ser Asp Arg Ser  
 100 105 110  
 Ser Ala Ala Trp Pro Gln Thr Thr Cys Ala  
 115 120

<210> 1141  
 <211> 354  
 <212> DNA  
 <213> Homo sapiens

<400> 1141  
 ggcgccatgc tcggcgggct ggtgctgggt gtggccgaag cctttggcgc cgatatcttc  
 60  
 ggcgaccagt acaaggacgt ggtggcggtt ggctgttggt ttctggtgct gttgttccgt  
 120  
 ccgaccggca ttctggggccg tccggagggt gagaaagtat gagcagatat cttaaactcg  
 180  
 cgtttttcag cgccctgttg gtgtgggccc tggcctttcc ggtactcggc ctcaagctga  
 240  
 gcattgtcgg gatcaaccac gaagtgcatt gcaccgggtc cgtgaccttg accatcatcg  
 300

ccctgtgctc ggtgccgatg ttctgcgcg tgctgtttac ccagcaagtc ggtg  
354

<210> 1142  
<211> 53  
<212> PRT  
<213> Homo sapiens

<400> 1142  
Gly Ala Met Leu Gly Gly Leu Val Leu Gly Val Ala Glu Ala Phe Gly  
1 5 10 15  
Ala Asp Ile Phe Gly Asp Gln Tyr Lys Asp Val Val Ala Phe Gly Leu  
20 25 30  
Leu Val Leu Val Leu Leu Phe Arg Pro Thr Gly Ile Leu Gly Arg Pro  
35 40 45  
Glu Val Glu Lys Val  
50

<210> 1143  
<211> 353  
<212> DNA  
<213> Homo sapiens

<400> 1143  
acgcgttgca catccccag gaccatcaac cgcggcattg ccgcatagac ctggagatcc  
60  
catgcaacgt gaaatgaagt tcgaatcgat caaggcaaag gccaaaggcga tgctcatcgg  
120  
cgcagccgac gacacagcaa gcgcaggcgc gaccaaccga ggggtgggtca acagcgccgc  
180  
attcgaaatc ctggcccacg tggccgtcaa tgcccaaacac tacgcgctct ccgagagacc  
240  
ggcgttgag gagttcgcca agagcttcca gccgcgcaac aaccaggact acgtggccgc  
300  
gatcgccaag aaggccgcga accacaccat gcatcccggc aggcagtcga ttt  
353

<210> 1144  
<211> 102  
<212> PRT  
<213> Homo sapiens

<400> 1144  
Met His Gly Val Val Arg Gly Leu Leu Gly Asp Arg Gly His Val Val  
1 5 10 15  
Leu Val Val Ala Arg Leu Glu Ala Leu Gly Glu Leu Leu Gln Arg Arg  
20 25 30  
Ser Leu Gly Glu Arg Val Val Leu Gly Ile Asp Gly His Val Gly Gln  
35 40 45  
Asp Phe Glu Cys Gly Ala Val Glu Pro Pro Ser Val Gly Arg Ala Cys  
50 55 60  
Ala Cys Cys Val Val Gly Cys Ala Asp Glu His Arg Leu Gly Leu Cys  
65 70 75 80  
Leu Asp Arg Phe Glu Leu His Phe Thr Leu His Gly Ile Ser Arg Ser

Met Arg Gln Cys Arg Gly  
100

85

90

95

<210> 1145  
<211> 360  
<212> DNA  
<213> Homo sapiens

<400> 1145  
gtcttcggcg ggctcggcct gttctattgc gtcattgaccc cgggtgtaactg gttctcggcc  
60  
catgaagtgg ccggcacctg ggtactcggg ctgtcggcgg cgatggctct gatgggtgtt  
120  
ttctacgtcc aggtcatcgc caagaagatc aatcctcgac cctccgacga gaaggacgcc  
180  
gaggtgatcg acggggctgg tccggtcggt ttcttcccgc cacagagtat ctggccgttc  
240  
tggtgcgcgc tcgttgtcgc catcatgtgc ctcgcccgga tottcggctg gtggatctct  
300  
ctgctcgggc tgggcattgt tatctgggccc gcctcggggtt gggcttttga gtactaccgc  
360

<210> 1146  
<211> 120  
<212> PRT  
<213> Homo sapiens

<400> 1146  
Val Phe Gly Gly Leu Gly Leu Phe Tyr Cys Val Met Thr Pro Val Tyr  
1 5 10 15  
Trp Phe Ser Ala His Glu Val Ala Gly Thr Trp Val Leu Gly Leu Ser  
20 25 30  
Ala Ala Met Ala Leu Met Val Phe Phe Tyr Val Gln Val Ile Ala Lys  
35 40 45  
Lys Ile Asn Pro Arg Pro Ser Asp Glu Lys Asp Ala Glu Val Ile Asp  
50 55 60  
Gly Ala Gly Pro Val Gly Phe Phe Pro Pro Gln Ser Ile Trp Pro Phe  
65 70 75 80  
Trp Cys Ala Leu Val Val Ala Ile Met Cys Leu Gly Pro Ile Phe Gly  
85 90 95  
Trp Trp Ile Ser Leu Leu Gly Leu Gly Ile Val Ile Trp Ala Ala Ser  
100 105 110  
Gly Trp Ala Phe Glu Tyr Tyr Arg  
115 120

<210> 1147  
<211> 409  
<212> DNA  
<213> Homo sapiens

<400> 1147  
tgtacattgg ctatgcagtc tggcctcctg aaggttatga tagtagccaa aaatatagaa  
60

gccaaaaagg catccacctt cttcatcaat ccagaattga tcatgctcat gcctgtgggt  
 120  
 ggatcactat gtgctctcca aattgggagg ggaagtctac tctcctctct cctctctctc  
 180  
 ccaccttccc ctctctcttc tctcctttct attcccaggg cagtgggaaca tgatgagggt  
 240  
 cttttccctt catggatata ctctttctgc cctccacata aaggggcatt gatggatctt  
 300  
 caagaatggg atgcctttcc ctagaaaggc taaatattca tgaggctgaa tgtgaggatc  
 360  
 cagagtacac tgaaatataa ctgggtcatca gtacacatag aatctgatn  
 409

<210> 1148  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 1148  
 Met Gln Ser Gly Leu Leu Lys Val Met Ile Val Ala Lys Asn Ile Glu  
 1 5 10 15  
 Ala Lys Lys Ala Ser Thr Phe Phe Ile Asn Pro Glu Leu Ile Met Leu  
 20 25 30  
 Met Pro Val Gly Gly Ser Leu Cys Ala Leu Gln Ile Gly Arg Gly Ser  
 35 40 45  
 Leu Leu Ser Ser Leu Leu Ser Leu Pro Pro Ser Pro Leu Ser Ser Leu  
 50 55 60  
 Leu Ser Ile Pro Arg Ala Val Glu His Asp Glu Val Leu Phe Pro Ser  
 65 70 75 80  
 Trp Ile Ser Ser Phe Cys Pro Pro His Lys Gly Ala Leu Met Asp Leu  
 85 90 95  
 Gln Glu Trp Asp Ala Phe Pro  
 100

<210> 1149  
 <211> 309  
 <212> DNA  
 <213> Homo sapiens

<400> 1149  
 gtcgacttct gcatggaaaa acgcgatctg gtgattgagc acgttgcgga gatgtacggc  
 60  
 cgtgaggcgg tatcgcagat cattaccttc ggtaccatgg cggcgaaagc ggttattcgt  
 120  
 gacgtggggc gtgtactggg tcacccgtat ggcttcgctg atcgcattct caagctggtg  
 180  
 ccgcccgatc cgggcatgac gctggaaaaa gcctttgccg ccgaaccgca gttgccggaa  
 240  
 atctacgagg ccgatgagga agtcaaagcg ctgatcgaca tggcgcgcaa gctgggaagg  
 300  
 gtgacgcgg  
 309

<210> 1150

<211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 1150  
 Val Asp Phe Cys Met Glu Lys Arg Asp Leu Val Ile Glu His Val Ala  
 1 5 10 15  
 Glu Met Tyr Gly Arg Glu Ala Val Ser Gln Ile Ile Thr Phe Gly Thr  
 20 25 30  
 Met Ala Ala Lys Ala Val Ile Arg Asp Val Gly Arg Val Leu Gly His  
 35 40 45  
 Pro Tyr Gly Phe Val Asp Arg Ile Ser Lys Leu Val Pro Pro Asp Pro  
 50 55 60  
 Gly Met Thr Leu Glu Lys Ala Phe Ala Ala Glu Pro Gln Leu Pro Glu  
 65 70 75 80  
 Ile Tyr Glu Ala Asp Glu Glu Val Lys Ala Leu Ile Asp Met Ala Arg  
 85 90 95  
 Lys Leu Gly Arg Val Thr Arg  
 100

<210> 1151  
 <211> 360  
 <212> DNA  
 <213> Homo sapiens

<400> 1151  
 gcgcgcattt tttgcaaccc aagcgacgtc attatggccg agtcgccggc ttatgtcggg  
 60  
 gcgctcaata ccttcgcctc gtaccaaact gaggtcattc acgtcgacat ggacgacagc  
 120  
 gggttgggtc cggaatccct gcgtgagaaa gtgactgcag cgcgtcaaga cggcaagtcg  
 180  
 gtgaagtcc tttacacggt tcctaactac tcgaaccctg cggaatctc gcaatccacc  
 240  
 gagcgtcgcc gggagatcct agcgggtggct gacgagctgg atctgttggg ggttgaggac  
 300  
 aaccgcgtacg gggttactcaa cctcgatggg gatccactgc cgacgttgaa gtcgatggat  
 360

<210> 1152  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

<400> 1152  
 Ala Arg Ile Phe Cys Asn Pro Ser Asp Val Ile Met Ala Glu Ser Pro  
 1 5 10 15  
 Ala Tyr Val Gly Ala Leu Asn Thr Phe Ala Ser Tyr Gln Thr Glu Val  
 20 25 30  
 Ile His Val Asp Met Asp Asp Ser Gly Leu Val Pro Glu Ser Leu Arg  
 35 40 45  
 Glu Lys Val Thr Ala Ala Arg Gln Asp Gly Lys Ser Val Lys Phe Leu  
 50 55 60  
 Tyr Thr Val Pro Asn Tyr Ser Asn Pro Ser Gly Ile Ser Gln Ser Thr

```

65          70          75          80
Glu Arg Arg Arg Glu Ile Leu Ala Val Ala Asp Glu Leu Asp Leu Leu
          85          90          95
Val Val Glu Asp Asn Pro Tyr Gly Leu Leu Asn Leu Asp Gly Asp Pro
          100          105          110
Leu Pro Thr Leu Lys Ser Met Asp
          115          120

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&lt;210&gt; 1153

&lt;211&gt; 416

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1153

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gcgtggattc gtctggcgg cgctcgctacc gacctgcccg agaccgggct cgaccagttg
60
cgtgacctca tcaagcggat ggaaaagtac ctccccgaga tcggtcagtt ctgcaatgag
120
aatccgatct ttaaggcccc cactcagggc attggttacg ctgatctgtc tacctgtatg
180
gccctgggag ttactggtcc tgctctgcgc gctaccggcc tgccgtggga cctgcgcaag
240
accagccct attgcgatta cgacacgtat gacttcgacg tcgccacctg ggatacctgt
300
gactgttacg ggcgtttccg catccgctcg gaagagatgg accagtcggt gcgcattctc
360
aagcaatgcc tcaaacgcct cgaggacacc cagggtgacc gtaatatggt cgagga
416

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&lt;210&gt; 1154

&lt;211&gt; 138

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1154

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Ala Trp Ile Arg Pro Gly Gly Val Ala Thr Asp Leu Pro Glu Thr Gly
 1          5          10          15
Leu Asp Gln Leu Arg Asp Leu Ile Lys Arg Met Glu Lys Tyr Leu Pro
          20          25          30
Glu Ile Gly Gln Phe Cys Asn Glu Asn Pro Ile Phe Lys Ala Arg Thr
          35          40          45
Gln Gly Ile Gly Tyr Ala Asp Leu Ser Thr Cys Met Ala Leu Gly Val
          50          55          60
Thr Gly Pro Ala Leu Arg Ala Thr Gly Leu Pro Trp Asp Leu Arg Lys
65          70          75          80
Thr Gln Pro Tyr Cys Asp Tyr Asp Thr Tyr Asp Phe Asp Val Ala Thr
          85          90          95
Trp Asp Thr Cys Asp Cys Tyr Gly Arg Phe Arg Ile Arg Leu Glu Glu
          100          105          110
Met Asp Gln Ser Val Arg Ile Leu Lys Gln Cys Leu Lys Arg Leu Glu
          115          120          125
Asp Thr Gln Gly Asp Arg Asn Met Val Glu
          130          135

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<210> 1155  
 <211> 339  
 <212> DNA  
 <213> Homo sapiens

<400> 1155  
 cttaagttat tttggtcttt gcctctctcc tcaggttgtg aagattacag aaatctggga  
 60  
 tggcttatgg gacgcttctc agccctaagt aggaaaacag cagtgaaaat ggcaaccaa  
 120  
 acatcacgca ggactggggg ttttggggaa acagctcact ttagagcagt gcagtgtaga  
 180  
 gctttccgtc ttctaccagg gtccaccttt aacactgttt atctgaaaat tttccccctg  
 240  
 gcttactcgc ttgcagctgc ccactttgca gaaagatggc gctctgatct ctacgctccc  
 300  
 tgttccttca gggactccat agtatttttt ttcacgcgt  
 339

<210> 1156  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

<400> 1156  
 Met Gly Arg Phe Ser Ala Leu Ser Arg Lys Thr Ala Val Lys Met Ala  
 1 5 10 15  
 Thr Lys Thr Ser Arg Arg Thr Gly Gly Phe Gly Glu Thr Ala His Phe  
 20 25 30  
 Arg Ala Val Gln Cys Arg Ala Phe Arg Leu Leu Pro Gly Ser Thr Phe  
 35 40 45  
 Asn Thr Val Tyr Leu Lys Ile Phe Pro Leu Ala Tyr Ser Leu Ala Ala  
 50 55 60  
 Ala His Phe Ala Glu Arg Trp Arg Ser Asp Leu Tyr Ala Pro Cys Ser  
 65 70 75 80  
 Phe Arg Asp Ser Ile Val Phe Phe Phe Thr Arg  
 85 90

<210> 1157  
 <211> 426  
 <212> DNA  
 <213> Homo sapiens

<400> 1157  
 nnacagcctc tctccgaccc ggcggcggtt gcacacgtcc ccgtctgagg agtattcgtg  
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 ctggcaaaac tcgtgaccgc acacctgagg gcctatcggt tgcacgttgc cgtcatcatc  
 120  
 gttatgcagg tttgcgcca aatcgcggcc ctgaccttgc caaccatcaa cgcagacatc  
 180  
 atcaacaagg gcgtcgtgac agcggatacc ggatatgtca ccaccactc cctcttcatg  
 240  
 ctggcggtcg ctttagggca ggccatctgc caggtcattg cggtttatct cgccgctcag  
 300

gtggcgatgg gaatggggccg tgacgttcgc gacgccatct tcacccgcac ccttgacttc  
 360  
 tcggccccggg agatcaacaa attcggagca ccatcactca ttacccggac taccaacgac  
 420  
 gtccag  
 426

<210> 1158  
 <211> 123  
 <212> PRT  
 <213> Homo sapiens

<400> 1158  
 Val Leu Ala Lys Leu Val Thr Arg His Leu Arg Ala Tyr Arg Leu His  
 1 5 10 15  
 Val Ala Val Ile Ile Val Met Gln Val Cys Ala Gln Ile Ala Ala Leu  
 20 25 30  
 Thr Leu Pro Thr Ile Asn Ala Asp Ile Ile Asn Lys Gly Val Val Thr  
 35 40 45  
 Ala Asp Thr Gly Tyr Val Thr Thr His Ser Leu Phe Met Leu Ala Val  
 50 55 60  
 Ala Leu Gly Gln Ala Ile Cys Gln Val Ile Ala Val Tyr Leu Ala Ala  
 65 70 75 80  
 Gln Val Ala Met Gly Met Gly Arg Asp Val Arg Asp Ala Ile Phe Thr  
 85 90 95  
 Arg Thr Leu Asp Phe Ser Ala Arg Glu Ile Asn Lys Phe Gly Ala Pro  
 100 105 110  
 Ser Leu Ile Thr Arg Thr Thr Asn Asp Val Gln  
 115 120

<210> 1159  
 <211> 434  
 <212> DNA  
 <213> Homo sapiens

<400> 1159  
 tctctccgac cgcgccctggg gcccggtggg gtcctgcggg gacgcgggcg aggacggcgc  
 60  
 ggacgaggca ggagcaggcc gggctctcgc catgggtcac tgtcgctctt gccacgggaa  
 120  
 gttttcctcg agaagcctgc gcagcatctc cgagagggcg cctggagcga gcatggagag  
 180  
 gccatccgca gaggagcgcg tgctcgtacg ggacttccag cgcttgcttg gtgtggctgt  
 240  
 ccgccaggac cccaccttgt ctccgtttgt ctgcaagagc tgccacgccc agttctacca  
 300  
 gtgccacagc cttctcaagt ccttcctgca gagggtcaac gcctccccgg ctggtcgccg  
 360  
 gaagccttgt gcaaaggctc gtgcccagcc cccaacaggg gcagaggagg gagcgtgtct  
 420  
 ggtggatctg atca  
 434

<210> 1160



<211> 114  
 <212> PRT  
 <213> Homo sapiens

<400> 1160  
 Met Gly His Cys Arg Leu Cys His Gly Lys Phe Ser Ser Arg Ser Leu  
 1 5 10 15  
 Arg Ser Ile Ser Glu Arg Ala Pro Gly Ala Ser Met Glu Arg Pro Ser  
 20 25 30  
 Ala Glu Glu Arg Val Leu Val Arg Asp Phe Gln Arg Leu Leu Gly Val  
 35 40 45  
 Ala Val Arg Gln Asp Pro Thr Leu Ser Pro Phe Val Cys Lys Ser Cys  
 50 55 60  
 His Ala Gln Phe Tyr Gln Cys His Ser Leu Leu Lys Ser Phe Leu Gln  
 65 70 75 80  
 Arg Val Asn Ala Ser Pro Ala Gly Arg Arg Lys Pro Cys Ala Lys Val  
 85 90 95  
 Gly Ala Gln Pro Pro Thr Gly Ala Glu Glu Gly Ala Cys Leu Val Asp  
 100 105 110  
 Leu Ile

<210> 1161  
 <211> 355  
 <212> DNA  
 <213> Homo sapiens

<400> 1161  
 ctgcacacac accaggccac gcccacgagg acggccagtc agcatgcagc caatacaccc  
 60  
 acagagggat ggggagcagc cctcagtgcc agctccaaca ggcccactgc aggtcctgtc  
 120  
 actgcaccca aggagctgcc ttccatttca cctgacattt ccactaaggg ccagcgttt  
 180  
 atcattccag aagagcagca ggcagaacct tcacctccca agagctgcaa gtgcgctgtg  
 240  
 gcaggaaaag aagatctggc gtctgaagtc agtcctgtct ctccaggaaa agagggacga  
 300  
 tgacatagga cttgagcaaa atgagagccc cgtgatggga gagaacacct gatca  
 355

<210> 1162  
 <211> 102  
 <212> PRT  
 <213> Homo sapiens

<400> 1162  
 Met Gln Pro Ile His Pro Gln Arg Asp Gly Glu Gln Pro Ser Val Pro  
 1 5 10 15  
 Ala Pro Thr Gly Pro Leu Gln Val Leu Ser Leu His Pro Arg Ser Cys  
 20 25 30  
 Leu Pro Phe His Leu Thr Phe Pro Leu Arg Ala Gln Arg Leu Ser Phe  
 35 40 45  
 Gln Lys Ser Ser Arg Gln Asn Leu His Leu Pro Arg Ala Ala Ser Ala

```

      50              55              60
Leu Trp Gln Glu Lys Lys Ile Trp Arg Leu Lys Ser Ala Pro Ala Leu
65              70              75              80
Gln Glu Lys Arg Asp Asp Asp Ile Gly Leu Glu Gln Asn Glu Ser Pro
      85              90              95
Val Met Gly Glu Asn Thr
      100

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<210> 1163  
 <211> 466  
 <212> DNA  
 <213> Homo sapiens

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<400> 1163
ngcgcgccag gaagcgggag gtcagctgta caccaggggt aatagaactt ctaccctcag
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aggagtcaaa gagaaggcag aactatggca ggaaagctcc ggaagtccca catccctgga
120
gtgagcatct ggcagctggg ggaggagatc cctgaaggct gcagcacgcc ggactttgag
180
cagaagcccg tcacctcggc tctgccagag gggaaaaatg ctgtctttcg ggctgtggtc
240
tgtgggggagc ccaggccccga ggtgcgttgg cagaactcca aagggtgacct cagtgattcc
300
agcaagtaca agatctcctc cagccctggc agcaaggagc acgtgctgca gatcaacaag
360
ctgacaggcg aggacacgga tctgtaccac tgcacagcag taaatgcgta cggagaggcc
420
gcttgctcag tgagactcac cgtcatcgaa gttggctttc ggaaga
466

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<210> 1164  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

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<400> 1164
Met Ala Gly Lys Leu Arg Lys Ser His Ile Pro Gly Val Ser Ile Trp
1      5      10      15
Gln Leu Val Glu Glu Ile Pro Glu Gly Cys Ser Thr Pro Asp Phe Glu
      20      25      30
Gln Lys Pro Val Thr Ser Ala Leu Pro Glu Gly Lys Asn Ala Val Phe
      35      40      45
Arg Ala Val Val Cys Gly Glu Pro Arg Pro Glu Val Arg Trp Gln Asn
      50      55      60
Ser Lys Gly Asp Leu Ser Asp Ser Ser Lys Tyr Lys Ile Ser Ser Ser
65      70      75      80
Pro Gly Ser Lys Glu His Val Leu Gln Ile Asn Lys Leu Thr Gly Glu
      85      90      95
Asp Thr Asp Leu Tyr His Cys Thr Ala Val Asn Ala Tyr Gly Glu Ala
      100      105      110
Ala Cys Ser Val Arg Leu Thr Val Ile Glu Val Gly Phe Arg Lys
      115      120      125

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<210> 1165  
 <211> 414  
 <212> DNA  
 <213> Homo sapiens

<400> 1165  
 tgggtggttc cggacacana aaatcacgtg ttgaaccgaa tttcaggcat ggtgaaaggc  
 60  
 tgcttttagta aagtccttgt tgagccgcgt ctgctcaagc tcaacttgac nattatgtgt  
 120  
 ctgcacattc tgctgatgtc cacgttcgtg gccctgcccc gtcagttggc tgcagcagga  
 180  
 ttccccgccg ctgaacactg gaaagtgtat ctggtgacga tgctcatctc cttegtctcc  
 240  
 gttgtccctt tcattatcta tgcagaagtg aaacgccgca tgaagcgcgt attcctgacg  
 300  
 tgtgttgccg tgctgttgat tgccgaaatc gtactatggg gctccgggcc acacttctgg  
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 gaactgggtca tcggcggtaca gcttttcttc ctgcgcttta atctcatgga agcc  
 414

<210> 1166  
 <211> 138  
 <212> PRT  
 <213> Homo sapiens

<400> 1166  
 Trp Val Val Pro Asp Thr Xaa Asn His Val Leu Asn Arg Ile Ser Gly  
 1 5 10 15  
 Met Val Lys Gly Cys Phe Ser Lys Val Leu Val Glu Pro Arg Leu Leu  
 20 25 30  
 Lys Leu Asn Leu Thr Ile Met Cys Leu His Ile Leu Leu Met Ser Thr  
 35 40 45  
 Phe Val Ala Leu Pro Gly Gln Leu Ala Ala Ala Gly Phe Pro Ala Ala  
 50 55 60  
 Glu His Trp Lys Val Tyr Leu Val Thr Met Leu Ile Ser Phe Val Ser  
 65 70 75 80  
 Val Val Pro Phe Ile Ile Tyr Ala Glu Val Lys Arg Arg Met Lys Arg  
 85 90 95  
 Val Phe Leu Thr Cys Val Ala Leu Leu Leu Ile Ala Glu Ile Val Leu  
 100 105 110  
 Trp Gly Ser Gly Pro His Phe Trp Glu Leu Val Ile Gly Val Gln Leu  
 115 120 125  
 Phe Phe Leu Ala Phe Asn Leu Met Glu Ala  
 130 135

<210> 1167  
 <211> 464  
 <212> DNA  
 <213> Homo sapiens

<400> 1167  
 gtgcaccccc tgggcaagag tcgcggcccc tgacgataac ttcacccccg cggccttgag  
 60

ctgttgggac cggctggcta aggcctgggc accggtagcg gcctgggtgga taccctcatg  
 120  
 tagccgggtg acctgcctga ccattcttcgg caaaccagtg cgcagttgtg tggatgaactc  
 180  
 attgaccctc cgagacagtc gtgaggaacc gtcagcaagt tcgtcgatgc cgtcgtcgat  
 240  
 gctcttgcca gagttcggat ccttgatcgc catcgccttg acggccaccc ccgaccagc  
 300  
 ccgcacgccc agggcgctacc catcgggtcat cgcgtcgcgg acgatgggta ccaggtcgtg  
 360  
 gcattcctgc gcggtgtggc ttcgcacgca tcgacgcagg aagtcagcct cgccccggga  
 420  
 cagggcttcc ttactaagtt ccgcggtttt ctttcccgac gcgt  
 464

<210> 1168

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1168

Met	Thr	Asp	Gly	Tyr	Ala	Leu	Gly	Val	Arg	Ala	Gly	Ser	Gly	Val	Ala
1				5					10					15	
Val	Lys	Ala	Met	Ala	Ile	Lys	Asp	Pro	Asn	Ser	Gly	Lys	Ser	Ile	Asp
		20						25					30		
Asp	Gly	Ile	Asp	Glu	Leu	Ala	Asp	Gly	Ser	Ser	Arg	Leu	Ser	Arg	Gly
		35					40					45			
Val	Asn	Glu	Phe	Thr	Thr	Gln	Leu	Arg	Thr	Gly	Leu	Pro	Lys	Met	Val
	50					55				60					
Arg	Gln	Val	Thr	Arg	Leu	His	Glu	Gly	Ile	His	Gln	Ala	Ala	Thr	Gly
65					70				75					80	
Ala	Gln	Ala	Leu	Ala	Ser	Arg	Ser	Gln	Gln	Leu	Lys	Ala	Gly	Gly	Val
			85					90					95		
Lys	Leu	Ser	Ser	Gly	Ala	Ala	Thr	Leu	Ala	His	Gly	Val	Asp		
			100					105					110		

<210> 1169

<211> 486

<212> DNA

<213> Homo sapiens

<400> 1169

nacgcgtgaa gggagcagaa cggacaccag ttactagtgg ctctggtcgg ggacagcctc  
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 ctagagcctt tctggccaat gggaacagga atagcccggg gctttctagc tgctatggac  
 120  
 tctgcctgga tgggtccgaag ttggtctcta ggaacgagcc ctttggaagt gctggcagag  
 180  
 agggaaagta ttacaggtt gctgcctcag accacccttg agaatgtgag taagaacttc  
 240  
 agccagtaca gtatcgaccc tgtcactcgg tatcccaata tcaacgtcaa cttcctccgg  
 300  
 ccaagccagg tgcgccatctt atatgatact ggcgaaacaa aagatattca cctggaaatg  
 360

gagagcctgg tgaattcccg aaccaccccc aaattgactc gcaatgagtc tgtagctcgt  
 420  
 tcaagcaaac tgctgggttg gtgccagagg cagacagatg gctatgcagg ggtaaactg  
 480  
 acagat  
 486

<210> 1170  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 1170  
 Arg Glu Gln Asn Gly His Gln Leu Leu Val Ala Leu Val Gly Asp Ser  
 1 5 10 15  
 Leu Leu Glu Pro Phe Trp Pro Met Gly Thr Gly Ile Ala Arg Gly Phe  
 20 25 30  
 Leu Ala Ala Met Asp Ser Ala Trp Met Val Arg Ser Trp Ser Leu Gly  
 35 40 45  
 Thr Ser Pro Leu Glu Val Leu Ala Glu Arg Glu Ser Ile Tyr Arg Leu  
 50 55 60  
 Leu Pro Gln Thr Thr Pro Glu Asn Val Ser Lys Asn Phe Ser Gln Tyr  
 65 70 75 80  
 Ser Ile Asp Pro Val Thr Arg Tyr Pro Asn Ile Asn Val Asn Phe Leu  
 85 90 95  
 Arg Pro Ser Gln Val Arg His Leu Tyr Asp Thr Gly Glu Thr Lys Asp  
 100 105 110  
 Ile His Leu Glu Met Glu Ser Leu Val Asn Ser Arg Thr Thr Pro Lys  
 115 120 125  
 Leu Thr Arg Asn Glu Ser Val Ala Arg Ser Ser Lys Leu Leu Gly Trp  
 130 135 140  
 Cys Gln Arg Gln Thr Asp Gly Tyr Ala Gly Val Asn Val Thr Asp  
 145 150 155

<210> 1171  
 <211> 429  
 <212> DNA  
 <213> Homo sapiens

<400> 1171  
 acgcgttcaa caaagcacag aaccggagat gcagtgggag ccgagagcag gaagcgcgga  
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 ggcagcgcca ggtgctggcg ctgcccagagg ccccgctgcca agtggggccc atagcagccg  
 120  
 actcgctaga ccctcccaaa acgcacacca cgcgcgacca ggaccgagag gcccgcacgg  
 180  
 ccctgctagg ccacaaacac tccactgtct ccagggtaaa agacaaacac agcctcgctt  
 240  
 gtccctccaa gagtacaacc tctgtctgat gaaaaacaaa cgaccagag agggaggcagc  
 300  
 tgccgggaca ctgcaggctg ggcccgcgc gcccttgagg ggcagggtcaa aatcccggaa  
 360  
 caggcacagt gttcaggctg attgactgtc ccaggccagg gcggcctcaa ctgccagagc  
 420

acctcctac  
429

<210> 1172  
<211> 118  
<212> PRT  
<213> Homo sapiens

<400> 1172  
Met Gln Trp Glu Pro Arg Ala Gly Ser Ala Glu Ala Ala Pro Gly Ala  
1 5 10 15  
Gly Ala Ala Arg Gly Pro Val Pro Ser Gly Ala His Ser Ser Arg Leu  
20 25 30  
Ala Arg Pro Ser Gln Asn Ala His His Ala Arg Pro Gly Pro Arg Gly  
35 40 45  
Pro His Gly Pro Ala Arg Pro Gln Thr Leu His Cys Leu Gln Gly Lys  
50 55 60  
Arg Gln Thr Gln Pro Arg Leu Ser Leu Gln Glu Tyr Asn Leu Cys Leu  
65 70 75 80  
Met Lys Asn Lys Arg Pro Arg Glu Glu Ala Ala Ala Gly Thr Leu Gln  
85 90 95  
Ala Gly Pro Ala Ala Pro Leu Glu Gly Arg Ser Lys Ser Arg Asn Arg  
100 105 110  
His Ser Val Gln Ala Asp  
115

<210> 1173  
<211> 435  
<212> DNA  
<213> Homo sapiens

<400> 1173  
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ggacttggggg ccgaggccaa gcgtcgcatc atcttgggta cctatgcctt gtcggctggg  
120  
tactatgacg cctactacgg ctcggtctcag aaagtccgta cctcatcca acgcgacttc  
180  
gagaaagcat ggcagatgtg cgatgtgctc gtgtcaccgg ccacgccaac gactgccttc  
240  
cggctggggtg agcgtactgc tgacccgatg gcgatgtacc gtcctgatct atgcacggtc  
300  
ccggccaata tggccggaag tcccgcagga tctttcccga tcggtctatc agagaccgac  
360  
ggcatgccccg tcggcatgca ggtgatggcg ccaatcatgg cggacgatcg aatctaccga  
420  
gttggggccg ctcta  
435

<210> 1174  
<211> 145  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 1174

Arg Val Asn Asp Asp Gly Glu His Ser Ala Glu Gln Val Met Arg Ala  
 1 5 10 15  
 Thr Arg Gly Ala Gly Leu Gly Ala Glu Ala Lys Arg Arg Ile Ile Leu  
 20 25 30  
 Gly Thr Tyr Ala Leu Ser Ala Gly Tyr Tyr Asp Ala Tyr Tyr Gly Ser  
 35 40 45  
 Ala Gln Lys Val Arg Thr Leu Ile Gln Arg Asp Phe Glu Lys Ala Trp  
 50 55 60  
 Gln Met Cys Asp Val Leu Val Ser Pro Ala Thr Pro Thr Thr Ala Phe  
 65 70 75 80  
 Arg Leu Gly Glu Arg Thr Ala Asp Pro Met Ala Met Tyr Arg Ser Asp  
 85 90 95  
 Leu Cys Thr Val Pro Ala Asn Met Ala Gly Ser Pro Ala Gly Ser Phe  
 100 105 110  
 Pro Ile Gly Leu Ser Glu Thr Asp Gly Met Pro Val Gly Met Gln Val  
 115 120 125  
 Met Ala Pro Ile Met Ala Asp Asp Arg Ile Tyr Arg Val Gly Ala Ala  
 130 135 140  
 Leu  
 145

&lt;210&gt; 1175

&lt;211&gt; 729

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1175

gatcgactg caatccaccc acatctactt gatatgaaaa ttgggtcaagg caaatatgag  
 60  
 caggggttct ttccaaagtt acagtccgat gtcttggcaa caggaccaac cagtaacaat  
 120  
 cgctgggttaa gtcggagtgc cactgcacag cgcaggaaaag gacgccttcg ccagcattct  
 180  
 gagcatgttg ggctggacaa cgacttgagg gagaaatata tgcaagaggc acgaagttaa  
 240  
 ggaaaaaacc tgaggcaacc caaactgtca gacctctctc ctgcagttat tgcacagacc  
 300  
 aactgtaaat tcgtagaagg cttattaaaa gaatgtagaa ataagacaaa gcgcatgttg  
 360  
 gtggagaaga tgggacatga agcgggtggaa cttggccatg gagaagcaaa catcaccggc  
 420  
 ctggaggaga acaccttgat cgccagcctt tgtgacctgc tggagaggat atggagccat  
 480  
 ggcttgcagg tcaagcaggg gaagtccggtt ttgtgggtcac atttaattcc ttttcaggac  
 540  
 agagaagaga accaagagcc cttgcagaa tcaccagttg ccctcggacc agaaagaaaa  
 600  
 aaatctgact caggagttat gttgccaacg ctcagggtct ctcttattca ggacatgagg  
 660  
 catattcaaa acatgagtga gatcaagact gatgttggac gagctcgggc gtggataaga  
 720  
 ctgtctcta  
 729

<210> 1176  
 <211> 243  
 <212> PRT  
 <213> Homo sapiens

<400> 1176  
 Asp Arg Thr Ala Ile His Pro His Leu Leu Asp Met Lys Ile Gly Gln  
 1 5 10 15  
 Gly Lys Tyr Glu Gln Gly Phe Phe Pro Lys Leu Gln Ser Asp Val Leu  
 20 25 30  
 Ala Thr Gly Pro Thr Ser Asn Asn Arg Trp Val Ser Arg Ser Ala Thr  
 35 40 45  
 Ala Gln Arg Arg Lys Gly Arg Leu Arg Gln His Ser Glu His Val Gly  
 50 55 60  
 Leu Asp Asn Asp Leu Arg Glu Lys Tyr Met Gln Glu Ala Arg Ser Leu  
 65 70 75 80  
 Gly Lys Asn Leu Arg Gln Pro Lys Leu Ser Asp Leu Ser Pro Ala Val  
 85 90 95  
 Ile Ala Gln Thr Asn Cys Lys Phe Val Glu Gly Leu Leu Lys Glu Cys  
 100 105 110  
 Arg Asn Lys Thr Lys Arg Met Leu Val Glu Lys Met Gly His Glu Ala  
 115 120 125  
 Val Glu Leu Gly His Gly Glu Ala Asn Ile Thr Gly Leu Glu Glu Asn  
 130 135 140  
 Thr Leu Ile Ala Ser Leu Cys Asp Leu Leu Glu Arg Ile Trp Ser His  
 145 150 155 160  
 Gly Leu Gln Val Lys Gln Gly Lys Ser Val Leu Trp Ser His Leu Ile  
 165 170 175  
 Pro Phe Gln Asp Arg Glu Glu Asn Gln Glu Pro Leu Ala Glu Ser Pro  
 180 185 190  
 Val Ala Leu Gly Pro Glu Arg Lys Lys Ser Asp Ser Gly Val Met Leu  
 195 200 205  
 Pro Thr Leu Arg Val Ser Leu Ile Gln Asp Met Arg His Ile Gln Asn  
 210 215 220  
 Met Ser Glu Ile Lys Thr Asp Val Gly Arg Ala Arg Ala Trp Ile Arg  
 225 230 235 240  
 Leu Ser Leu

<210> 1177  
 <211> 581  
 <212> DNA  
 <213> Homo sapiens

<400> 1177  
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 60  
 cgtcgcacag ctgcgagagg tgggcattgc cgagtgaggc aacgatgtct aaggcggaaa  
 120  
 gctcattctc ggcagacggg aagactttgt cgtcggggat gttgtcaatg agagcgggga  
 180  
 cgtcgatctc ggtactgcc atggcgatcat gaaggatcgc gcgatacggg gcgacgaccc  
 240



cgatgagggc gtcgtcgaat ccagcgatga tcgatacctc tctcggtage acgtccgtgg  
 300  
 ccaacaggtg gtcgacttgg gcgggggcta gccatgtaat tgttccgagc acatggaggg  
 360  
 tggctgccag gaggcggatg gccgggttctg gggcatcttt ggagatcttc agccggacat  
 420  
 cagtgggagc tccggccggg acttggcaga gggcctgggc gggatgggag cgctgggaga  
 480  
 cgacgaaacg ccccgacgcc gtaacgccgt gggcttggag atgcaggte cacttctctg  
 540  
 ggctttcacc ggcagagatc atggtgtgga ccaccattgt g  
 581

<210> 1178

<211> 192

<212> PRT

<213> Homo sapiens

<400> 1178

Met	Val	Val	His	Thr	Met	Ile	Ser	Ala	Gly	Glu	Ser	Pro	Glu	Lys	Trp
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Thr	Cys	Asp	Leu	Gln	Ala	His	Gly	Val	Thr	Ala	Ser	Gly	Arg	Phe	Val
			20					25					30		
Val	Ala	Gln	Arg	Ser	His	Pro	Ala	Gln	Ala	Leu	Cys	Gln	Val	Pro	Ala
			35				40					45			
Gly	Leu	Pro	Thr	Asp	Val	Arg	Leu	Lys	Ile	Ser	Lys	Asp	Ala	Pro	Glu
	50					55					60				
Pro	Ala	Ile	Arg	Leu	Leu	Ala	Ala	Thr	Leu	His	Val	Leu	Gly	Thr	Ile
65					70				75					80	
Thr	Trp	Leu	Ala	Pro	Ala	Gln	Val	Asp	His	Leu	Leu	Ala	Thr	Asp	Val
				85				90						95	
Leu	Pro	Arg	Glu	Val	Ser	Ile	Ile	Ala	Gly	Phe	Asp	Asp	Ala	Leu	Ile
			100					105					110		
Gly	Val	Val	Ala	Pro	Tyr	Arg	Ala	Ile	Leu	His	Asp	Ala	Met	Gly	Ser
			115				120					125			
Thr	Glu	Ile	Asp	Val	Pro	Ala	Leu	Ile	Asp	Asn	Ile	Pro	Asp	Asp	Lys
	130					135					140				
Val	Phe	Pro	Ser	Ala	Glu	Asp	Glu	Leu	Ser	Ala	Leu	Asp	Ile	Val	Ala
145					150					155				160	
Ser	Leu	Gly	Asn	Ala	His	Leu	Ser	Gln	Leu	Cys	Asp	Gly	Val	His	Lys
				165					170					175	
Lys	Thr	Val	Phe	Gly	Cys	Ser	Cys	Trp	Ser	Arg	Ala	Thr	His	His	Ala
			180					185					190		

<210> 1179

<211> 597

<212> DNA

<213> Homo sapiens

<400> 1179

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 120

agaccctgcc ctgggaacgg ccggaagaat cccaaaacat gagattccgg tgcagctgag  
 180  
 ccccgccaat tcattgtctc ttccagtccc ttctgaaggc tgcatttggc aatgtgaccc  
 240  
 tcggggtggg gaaggcatca gaggaataca ggctatggga cgccagaggc agcgtcctgg  
 300  
 ggacaaagcc cacttcttcc catgcccagg gcttcctcat ggaccagca tgggtggacgt  
 360  
 ggccctcaga cgtccatggg tgggtggggga ggcacgtgct gtttggccct gtctctgctc  
 420  
 agagtctcat aggaagatgc atgggtccaca caacagtgag tcggcagggga gtccaggctt  
 480  
 cccctcccaa ccagtgggtgt tgagacgctt ggtttataac ccaagatccc ttgtcccatt  
 540  
 ggtgcctcct gaatctccca cctcccgagg cacctgcatg gcctctacct gacgcgt  
 597

<210> 1180  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 1180  
 Met Gly Arg Gln Arg Gln Arg Pro Gly Asp Lys Ala His Phe Phe Pro  
 1 5 10 15  
 Cys Pro Gly Leu Pro His Gly Pro Ser Met Val Asp Val Ala Leu Arg  
 20 25 30  
 Arg Pro Trp Val Val Gly Glu Ala Arg Ala Val Trp Pro Cys Leu Cys  
 35 40 45  
 Ser Glu Ser His Arg Lys Met His Gly Pro His Asn Ser Glu Ser Ala  
 50 55 60  
 Gly Ser Pro Gly Phe Pro Ser Gln Pro Val Val Leu Arg Arg Leu Val  
 65 70 75 80  
 Tyr Asn Pro Arg Ser Leu Val Pro Leu Val Pro Pro Glu Ser Pro Thr  
 85 90 95  
 Ser Arg Gly Thr Cys Met Ala Ser Thr  
 100 105

<210> 1181  
 <211> 352  
 <212> DNA  
 <213> Homo sapiens

<400> 1181  
 gtcgactacc tcgatgtttc cccgcgtcag atgggtctccg tggctactgc catgattccg  
 60  
 ttccctcgagc acgacgacgc taaccgtgcc ctgatgggtg cgaacatgca gcgtcaggct  
 120  
 gtgccgctgc tgcgttcgga ggctccgttc gtcgggtaccg gtatggagca gcgtgctgct  
 180  
 tacgacgccg gcgatgtcat tgctgcttcg gccacagggtg tggctcgagac cgtgtcggca  
 240  
 ggcttcatca ccatcatgga cgatgagggc cagcgccaca cctacctgct gcgcaagttc  
 300

gagcgcacca accagggcac ctgctacaac cagaagccac tggtgacgag gg  
352

<210> 1182

<211> 117

<212> PRT

<213> Homo sapiens

<400> 1182

Val	Asp	Tyr	Leu	Asp	Val	Ser	Pro	Arg	Gln	Met	Val	Ser	Val	Ala	Thr
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Ala	Met	Ile	Pro	Phe	Leu	Glu	His	Asp	Asp	Ala	Asn	Arg	Ala	Leu	Met
			20					25					30		
Gly	Ala	Asn	Met	Gln	Arg	Gln	Ala	Val	Pro	Leu	Leu	Arg	Ser	Glu	Ala
		35					40					45			
Pro	Phe	Val	Gly	Thr	Gly	Met	Glu	Gln	Arg	Ala	Ala	Tyr	Asp	Ala	Gly
	50					55					60				
Asp	Val	Ile	Val	Ala	Ser	Ala	Thr	Gly	Val	Val	Glu	Thr	Val	Ser	Ala
65					70					75				80	
Gly	Phe	Ile	Thr	Ile	Met	Asp	Asp	Glu	Gly	Gln	Arg	His	Thr	Tyr	Leu
				85					90					95	
Leu	Arg	Lys	Phe	Glu	Arg	Thr	Asn	Gln	Gly	Thr	Cys	Tyr	Asn	Gln	Lys
			100					105					110		
Pro	Leu	Leu	Thr	Arg											
			115												

<210> 1183

<211> 432

<212> DNA

<213> Homo sapiens

<400> 1183

gaccccttctg ggcgctgggc caagcgcgtg gtgaggccgt cctctcctgc agaaccccgg  
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cctcttcgcc cctgcccgct cacctgttct gtccctgtca cctcctccag gaagcctgcc  
120  
tgcccttctc catgctgatg ggcgtggccc ttgtccctgc agccatgcat tgacctcgt  
180  
ggctcctgga ggccaggcca cgtcctcatc ccctctgggt gaggtagagg cacagcctgg  
240  
gtgcgtgggg ccgtggcggc tccgaggcgc caccgctgtg tctctcatg agtgggtgcc  
300  
gtccaggtct gtccctgggt ggctgagagg aggaggttgg cctcgcgagg ccatgtgcgt  
360  
gacagtggag acatcgccag cctcctgctt gcacagctga cggcagcccc tctctctcca  
420  
gccatgtccc ca  
432

<210> 1184

<211> 141

<212> PRT

<213> Homo sapiens

&lt;400&gt; 1184

Met Ala Gly Glu Arg Gly Ala Ala Val Ser Cys Ala Ser Arg Arg Leu  
 1 5 10 15  
 Ala Met Ser Pro Leu Ser Arg Thr Trp Pro Arg Glu Ala Asn Leu Leu  
 20 25 30  
 Leu Ala Ala Ser Pro Gly Gln Thr Trp Thr Ala Pro Thr His Glu Arg  
 35 40 45  
 Thr Gln Arg Trp Arg Leu Gly Ala Ala Thr Ala Pro Arg Thr Gln Ala  
 50 55 60  
 Val Pro Leu Thr His Pro Glu Gly Met Arg Thr Trp Pro Gly Leu Gln  
 65 70 75 80  
 Glu Pro Arg Arg Ser Met His Gly Cys Arg Asp Lys Gly His Ala His  
 85 90 95  
 Gln His Gly Glu Gly Gln Ala Gly Phe Leu Glu Glu Val Ser Arg Thr  
 100 105 110  
 Glu Gln Val Ser Gly Gln Gly Arg Arg Gly Arg Gly Ser Ala Gly Glu  
 115 120 125  
 Asp Gly Leu Thr Thr Arg Leu Asp Gln Arg Pro Glu Gly  
 130 135 140

&lt;210&gt; 1185

&lt;211&gt; 423

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1185

accggtgaat ttggccttaa cagcgatgga actcctggcc catccttatga acctggcatg  
 60  
 gaattacgcg gcaaatatgt attgttgggt gaaggtgtac ggggctctct atctaaacaa  
 120  
 gtcatcaata aataccaatt atccgagggt catgaaccac aaaagttcgg ccttggctta  
 180  
 aaagaaattt gggaaataga cccagaaaaa cacaaagaag gcagagtcag tcataccatg  
 240  
 ggctggccat taaatggcaa tgctggcggc gggtcttttta tttatcatgc agaaaacaat  
 300  
 caagtcttta tcggctttgt ggtgcatctt aattacgcca acccttacct atcccccttac  
 360  
 caagaatttc aacgctttta acaccatccg attatcgagg agctattaac tggcggtaaa  
 420  
 cgc  
 423

&lt;210&gt; 1186

&lt;211&gt; 141

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1186

Thr Gly Glu Phe Gly Leu Asn Ser Asp Gly Thr Pro Gly Pro Ser Tyr  
 1 5 10 15  
 Glu Pro Gly Met Glu Leu Arg Gly Lys Tyr Val Leu Leu Gly Glu Gly  
 20 25 30  
 Val Arg Gly Ser Leu Ser Lys Gln Val Ile Asn Lys Tyr Gln Leu Ser

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      35              40              45
Glu Gly His Glu Pro Gln Lys Phe Gly Leu Gly Leu Lys Glu Ile Trp
  50              55              60
Glu Ile Asp Pro Glu Lys His Lys Glu Gly Arg Val Ser His Thr Met
  65              70              75              80
Gly Trp Pro Leu Asn Gly Asn Ala Gly Gly Gly Ser Phe Ile Tyr His
      85              90              95
Ala Glu Asn Asn Gln Val Phe Ile Gly Phe Val Val His Leu Asn Tyr
      100              105              110
Ala Asn Pro Tyr Leu Ser Pro Tyr Gln Glu Phe Gln Arg Phe Lys His
      115              120              125
His Pro Ile Ile Ala Glu Leu Leu Thr Gly Gly Lys Arg
      130              135              140

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<210> 1187

<211> 387

<212> DNA

<213> Homo sapiens

<400> 1187

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acgcgtgctg gtagagtttaa attgaatgct gatggtaatt tggtagacgaa ttcaggggct
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aagggtccagg gctataatgc aatagatggc atagtcggtg ggaacttaga agatatggta
120
gtaccactg ctcgaaatttc tcctcaagca acatcaagtg ttgatttaaa agtgaatctt
180
aattccgaag gtaggatgt gccgccttat attcgagcgg actttgatcc agccaatcca
240
gatacttatg actatactca gacccaaacg gttgcggatg ggagtggtaa taatcattta
300
attagttatt actatgctaa aagtgatgta gcaaatacct atcagggtta tgccacggta
360
gatgggaagt cgactgatga taccggt
387

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<210> 1188

<211> 129

<212> PRT

<213> Homo sapiens

<400> 1188

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Thr Arg Ala Gly Glu Phe Lys Leu Asn Ala Asp Gly Asn Leu Val Thr
  1              5              10              15
Asn Ser Gly Ala Lys Val Gln Gly Tyr Asn Ala Ile Asp Gly Ile Val
      20              25              30
Gly Gly Asn Leu Glu Asp Met Val Val Pro Thr Ala Arg Ile Ser Pro
      35              40              45
Gln Ala Thr Ser Ser Val Asp Leu Lys Val Asn Leu Asn Ser Glu Gly
      50              55              60
Glu Asp Val Pro Pro Tyr Ile Arg Ala Asp Phe Asp Pro Ala Asn Pro
  65              70              75              80
Asp Thr Tyr Asp Tyr Thr Gln Thr Gln Thr Val Ala Asp Gly Ser Gly
      85              90              95
Asn Asn His Leu Ile Ser Tyr Tyr Tyr Ala Lys Ser Asp Val Ala Asn

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	100		105		110										
Thr	Tyr	Gln	Val	Tyr	Ala	Thr	Val	Asp	Gly	Lys	Ser	Thr	Asp	Asp	Thr
	115		120		125										

Gly

<210> 1189  
 <211> 330  
 <212> DNA  
 <213> Homo sapiens

<400> 1189  
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 60  
 ctgggtgctg gtttcattgg cggcatcggt gcaggttttc tggccggtta cagcgccaag  
 120  
 gccattgccc gctggggcacg gctgcccagc agcctggatg cgctcaaacc gattctgatc  
 180  
 atttcgctgc tggccagcct gttcactggg ttggtgatga tctacgtggt cggccagccg  
 240  
 gtggcggcca tgctcggagg cctgacacac tttctcgaca gcatgggtac caccaacgcc  
 300  
 attctcctgg gcntgttgct cggcggctag  
 330

<210> 1190  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 1190  
 Ser Ile Ala Asp Arg Pro Gly Leu Ala Pro Gly Met Ile Gly Gly Leu  
 1 5 10 15  
 Leu Ala Ser Thr Leu Gly Ala Gly Phe Ile Gly Gly Ile Val Ala Gly  
 20 25 30  
 Phe Leu Ala Gly Tyr Ser Ala Lys Ala Ile Ala Arg Trp Ala Arg Leu  
 35 40 45  
 Pro Ser Ser Leu Asp Ala Leu Lys Pro Ile Leu Ile Ile Ser Leu Leu  
 50 55 60  
 Ala Ser Leu Phe Thr Gly Leu Val Met Ile Tyr Val Val Gly Gln Pro  
 65 70 75 80  
 Val Ala Ala Met Leu Gly Gly Leu Thr His Phe Leu Asp Ser Met Gly  
 85 90 95  
 Thr Thr Asn Ala Ile Leu Leu Gly Xaa Leu Leu Gly Gly  
 100 105

<210> 1191  
 <211> 351  
 <212> DNA  
 <213> Homo sapiens

<400> 1191  
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gcagggacta acggacagac catgcagaca ccgccggtgg tgtcgccgca ggactgggag  
 120  
 gcagcccgtc agcaactgct cgtgaaggaa aaggcgcata cccgtgcccc cgacgcactc  
 180  
 gccgccgaac ggagggcgcat gccgtggatg gaagtgacaa aaacctacgc attcgaggcg  
 240  
 ccttcgggca aggccagtct gctcgatctg ttccagggcc ggaagcagct gatcctgtac  
 300  
 cgggccttct tcgagccggg cgtgttcggc tggcccgacc atgcctgccg c  
 351

<210> 1192

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1192

Met	Cys	Gly	Glu	Gln	Glu	Ile	Trp	Arg	Ala	Met	Met	Thr	Ser	Ala	Asp
1				5					10					15	
Lys	Ala	Gly	Thr	Asn	Gly	Gln	Thr	Met	Gln	Thr	Pro	Pro	Val	Val	Ser
			20					25					30		
Pro	Gln	Asp	Trp	Glu	Ala	Ala	Arg	Gln	Gln	Leu	Leu	Val	Lys	Glu	Lys
			35				40					45			
Ala	His	Thr	Arg	Ala	Arg	Asp	Ala	Leu	Ala	Ala	Glu	Arg	Arg	Arg	Met
	50					55					60				
Pro	Trp	Met	Glu	Val	Thr	Lys	Thr	Tyr	Ala	Phe	Glu	Ala	Pro	Ser	Gly
65					70				75				80		
Lys	Ala	Ser	Leu	Leu	Asp	Leu	Phe	Gln	Gly	Arg	Lys	Gln	Leu	Ile	Leu
			85					90					95		
Tyr	Arg	Ala	Phe	Phe	Glu	Pro	Gly	Val	Phe	Gly	Trp	Pro	Asp	His	Ala
			100					105					110		

Cys Arg

<210> 1193

<211> 722

<212> DNA

<213> Homo sapiens

<400> 1193

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 cgacttagga cgcccagttt gtactcagtg tttgctcttt tatggcagag cctctgcact  
 120  
 cccagcctcc tggccccttc tgtacatgat tttccttgtg gccactccat gcatttttct  
 180  
 tggctcagga cttagtgggc ctccatggga cttggtacct ctacttggtc ctttctggaa  
 240  
 tctgtaactt tgtgttcccc accattcttt cttttatgaa ccgatggtgc aacagcatga  
 300  
 ctacctgaaa ttcttagtca ctcccagctg ctttagtgga gggaaaatgc ccacagcaca  
 360  
 ggaaaatagtc ctgcccttcg agagaggcca ggggatggga gcgtgtccag agaagggcga  
 420

tgggttgatg aaggggtggcc acagcgcccg ggaggaaggg gccagaacgc tctctgttct  
 480  
 gttccatgag gaggattatg ttggtgtgtg tagtcccctg gttcagagtt gtccagaaat  
 540  
 agctcagtgt aaggaacaat tttccaaaga tcaaaagagc tgtctcaaga tagcagtgcg  
 600  
 ttcccagccc ctacaggtgt atacagcaca aagggagggga cccctagtgt tggctgtcac  
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 agaggggaagt ggacgtcctg tggtttgacc ccaccagatg gcttttagaga tctgggccccg  
 720  
 ag  
 722

<210> 1194  
 <211> 134  
 <212> PRT  
 <213> Homo sapiens

<400> 1194  
 Met Val Gln Gln His Asp Tyr Leu Lys Phe Leu Val Thr Pro Ser Cys  
 1 5 10 15  
 Phe Ser Gly Gly Lys Met Pro Thr Ala Gln Glu Ile Val Leu Pro Phe  
 20 25 30  
 Glu Arg Gly Gln Gly Met Gly Ala Cys Pro Glu Lys Gly Asp Gly Leu  
 35 40 45  
 Met Lys Gly Gly His Ser Ala Arg Glu Glu Gly Ala Arg Thr Leu Ser  
 50 55 60  
 Val Leu Phe His Glu Glu Asp Tyr Val Gly Val Cys Ser Pro Leu Val  
 65 70 75 80  
 Gln Ser Cys Pro Glu Ile Ala Gln Cys Lys Glu Gln Phe Ser Lys Asp  
 85 90 95  
 Gln Lys Ser Cys Leu Lys Ile Ala Val Arg Ser Gln Pro Leu Gln Val  
 100 105 110  
 Tyr Thr Ala Gln Arg Glu Gly Pro Pro Ser Val Ala Val Thr Glu Gly  
 115 120 125  
 Ser Gly Arg Pro Val Val  
 130

<210> 1195  
 <211> 391  
 <212> DNA  
 <213> Homo sapiens

<400> 1195  
 tctagagcat gatattccgc gggcgcggcc ggggtggactt tggttcgaga gtggaactaa  
 60  
 gtgagtaatg ggggcggcgc ggccagacgc gctcccagcc tcctggcgag agtgctgccc  
 120  
 ggtttcccgg gggcacggga gtgtgtctag gaggggaggc caggatcctt cctcgagtcc  
 180  
 tgtcctgaac aaaagaaaac gaggtgggtg gtgcttgaac ggccctgttt actctgcaga  
 240  
 tagccgaact ggtaggactc cggcgcgccc tatttatctt gattggctct gcctgaaggc  
 300



aagcgttaat cccgtccaac ctgtatcact gcgaagagct cgttcgggag cgctttttgg  
 360  
 aaatgcagat tcttagcccc caccagatc t  
 391

<210> 1196  
 <211> 102  
 <212> PRT  
 <213> Homo sapiens

<400> 1196  
 Met Gly Ala Ala Arg Pro Asp Ala Leu Pro Ala Ser Trp Arg Glu Cys  
 1 5 10 15  
 Cys Pro Val Ser Arg Gly His Gly Ser Val Ser Arg Arg Gly Gly Gln  
 20 25 30  
 Asp Pro Ser Ser Ser Pro Val Leu Asn Lys Arg Lys Arg Gly Gly Trp  
 35 40 45  
 Cys Leu Asn Gly Pro Val Tyr Ser Ala Asp Ser Arg Thr Gly Arg Thr  
 50 55 60  
 Pro Ala Arg Pro Ile Tyr Leu Asp Trp Leu Cys Leu Lys Ala Ser Val  
 65 70 75 80  
 Asn Pro Val Gln Pro Val Ser Leu Arg Arg Ala Arg Ser Gly Ala Leu  
 85 90 95  
 Phe Gly Asn Ala Asp Ser  
 100

<210> 1197  
 <211> 386  
 <212> DNA  
 <213> Homo sapiens

<400> 1197  
 acgcgtgatg atcatgaaaa tggtagacag cgtctagcag aagtcgcctc tgtgatgggc  
 60  
 tggcagcaag atgaaatcat cgtaaacgta caaggggatg aaccctttct gcctgttgca  
 120  
 cttattcatg ccacgggttaa agcgttagcc gatgatgctg aatctgaaat ggccacgatt  
 180  
 gcctgtgcga ttgataacgt agcagagctg ttaacccaa atgtagttaa agtcgtttgt  
 240  
 gatgaaaaac agcgcgcctt gtatttcagt cgtgcgccta tgccatggga ccgtaatggg  
 300  
 tttatggaaa aaacagacga tcaagcgta ccagcggatt ttctgcggt gcgtcatatt  
 360  
 ggtccgtatg tttaccgcac gacatn  
 386

<210> 1198  
 <211> 128  
 <212> PRT  
 <213> Homo sapiens

<400> 1198  
 Thr Arg Asp Asp His Glu Asn Gly Thr Glu Arg Leu Ala Glu Val Ala

1				5					10					15				
Ser	Val	Met	Gly	Trp	Gln	Gln	Asp	Glu	Ile	Ile	Val	Asn	Val	Gln	Gly			
			20					25					30					
Asp	Glu	Pro	Phe	Leu	Pro	Val	Ala	Leu	Ile	His	Ala	Thr	Val	Lys	Ala			
		35					40					45						
Leu	Ala	Asp	Asp	Ala	Glu	Ser	Glu	Met	Ala	Thr	Ile	Ala	Cys	Ala	Ile			
	50					55					60							
Asp	Asn	Val	Ala	Glu	Leu	Phe	Asn	Pro	Asn	Val	Val	Lys	Val	Val	Cys			
65					70				75						80			
Asp	Glu	Lys	Gln	Arg	Ala	Leu	Tyr	Phe	Ser	Arg	Ala	Pro	Met	Pro	Trp			
				85				90				95						
Asp	Arg	Asn	Gly	Phe	Met	Glu	Lys	Thr	Asp	Asp	Gln	Ala	Leu	Pro	Ala			
			100					105				110						
Asp	Phe	Pro	Ala	Leu	Arg	His	Ile	Gly	Pro	Tyr	Val	Tyr	Arg	Thr	Thr			
		115					120					125						

&lt;210&gt; 1199

&lt;211&gt; 318

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1199

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acgcgttcag cgatcatgtac agccccgggc cgggtcaattt gatgggcctc aatgccgggc
60
ttacgggcaa attgcgtcgc tccagcgggtt tctacatcgg cgtgggggtgc gcgatgctgc
120
tgatggtcgg gctggttggg ctcaccggcg aagcgatcat ctcccaggcg gcgctgccgt
180
atatttcttt gattggcggg gtgtacacgc tgtacctcgc ctaccagggtg ttcaccgcac
240
gtaccgaagt ggatgacgcc ccaagcgcg ctcgccaagac cttgaccttc tggaatggcc
300
tggtgatcca gttgctcc
318

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&lt;210&gt; 1200

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1200

Met	Tyr	Ser	Pro	Gly	Pro	Val	Asn	Leu	Met	Gly	Leu	Asn	Ala	Gly	Leu			
1				5					10					15				
Thr	Gly	Lys	Leu	Arg	Arg	Ser	Ser	Gly	Phe	Tyr	Ile	Gly	Val	Gly	Cys			
			20					25					30					
Ala	Met	Leu	Leu	Met	Val	Gly	Leu	Val	Gly	Leu	Thr	Gly	Glu	Ala	Ile			
		35				40					45							
Ile	Ser	Gln	Ala	Ala	Leu	Pro	Tyr	Ile	Ser	Leu	Ile	Gly	Gly	Val	Tyr			
	50					55					60							
Thr	Leu	Tyr	Leu	Ala	Tyr	Gln	Val	Phe	Thr	Ala	Arg	Thr	Glu	Val	Asp			
65					70				75						80			
Asp	Ala	Pro	Ser	Ala	Pro	Ala	Lys	Thr	Leu	Thr	Phe	Trp	Asn	Gly	Leu			
				85				90					95					
Val	Ile	Gln	Leu	Leu														

100

<210> 1201  
 <211> 360  
 <212> DNA  
 <213> Homo sapiens

<400> 1201  
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 60  
 atgatactca ccgtgctgcg catggccaag gatgaccgca accgttggaat tgcaaaaatc  
 120  
 acgctgcagg cgatccgca gctggataac gccttcgcg tgctggaaca gttcaagggc  
 180  
 cgccgcaagg tcacgggtgtt tggctcggcg cgcacgccgg tcgaaagccc gctgtacgcc  
 240  
 ttggcaaggg aagtcggcac gctgctggcg caatccgacc tgatgggtgat caccggcggt  
 300  
 ggcggcgcca tcatggccgc tgcccacgag ggcgcaaggt ctggaacaca gcctgggggt  
 360

<210> 1202  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

<400> 1202  
 Val Asp Ala Gln Leu Gln Leu Val Ala Pro Asn Ser Pro Asn Ile Pro  
 1 5 10 15  
 Leu Tyr Arg Asp Met Ile Leu Thr Val Leu Arg Met Ala Lys Asp Asp  
 20 25 30  
 Arg Asn Arg Trp Asn Ala Lys Ile Thr Leu Gln Ala Ile Arg Glu Leu  
 35 40 45  
 Asp Asn Ala Phe Arg Val Leu Glu Gln Phe Lys Gly Arg Arg Lys Val  
 50 55 60  
 Thr Val Phe Gly Ser Ala Arg Thr Pro Val Glu Ser Pro Leu Tyr Ala  
 65 70 75 80  
 Leu Ala Arg Glu Val Gly Thr Leu Leu Ala Gln Ser Asp Leu Met Val  
 85 90 95  
 Ile Thr Gly Gly Gly Gly Gly Ile Met Ala Ala Ala His Glu Gly Ala  
 100 105 110  
 Arg Ser Gly Thr Gln Pro Gly Gly  
 115 120

<210> 1203  
 <211> 477  
 <212> DNA  
 <213> Homo sapiens

<400> 1203  
 ccggatatgg cagctcgact tcattcgacc agagttcttg gaacatttg ctatcatgca  
 60  
 cctgagtatg caatgactgg acaacttagc tctaagagt acgtttacag ttttggagtt  
 120

ggtcttcttg agtcctgac tggaagaaag cctgtggatc ttccattacc aagaggacag  
 180  
 caaagtcttg tgacatgggc aactccacgg ctttgtgaag ataaagttag gcaatgcgtt  
 240  
 gattcaagac ttggagtaga atatcctcct aaatccgttg caaagtttgc agctgttgct  
 300  
 gcactgtgtg tgcaatatga agctgacttt cgacccaaca tgagcatcgt ggtgaaggcg  
 360  
 cttcagcccc tgctgaatgc acgtgcatcc aacaaccctg gatgaatgaa tgaatgactg  
 420  
 ccgttgcttt tccctgacga gagtatctga atcagacaat catgtagcat tgaattc  
 477

<210> 1204

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1204

Pro	Asp	Met	Ala	Ala	Arg	Leu	His	Ser	Thr	Arg	Val	Leu	Gly	Thr	Phe
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Gly	Tyr	His	Ala	Pro	Glu	Tyr	Ala	Met	Thr	Gly	Gln	Leu	Ser	Ser	Lys
			20					25					30		
Ser	Asp	Val	Tyr	Ser	Phe	Gly	Val	Gly	Leu	Leu	Glu	Leu	Leu	Thr	Gly
		35					40					45			
Arg	Lys	Pro	Val	Asp	Leu	Pro	Leu	Pro	Arg	Gly	Gln	Gln	Ser	Leu	Val
		50				55					60				
Thr	Trp	Ala	Thr	Pro	Arg	Leu	Cys	Glu	Asp	Lys	Val	Arg	Gln	Cys	Val
65					70					75				80	
Asp	Ser	Arg	Leu	Gly	Val	Glu	Tyr	Pro	Pro	Lys	Ser	Val	Ala	Lys	Phe
				85					90					95	
Ala	Ala	Val	Ala	Ala	Leu	Cys	Val	Gln	Tyr	Glu	Ala	Asp	Phe	Arg	Pro
			100					105					110		
Asn	Met	Ser	Ile	Val	Val	Lys	Ala	Leu	Gln	Pro	Leu	Leu	Asn	Ala	Arg
		115					120						125		
Ala	Ser	Asn	Asn	Pro	Gly										
			130												

<210> 1205

<211> 407

<212> DNA

<213> Homo sapiens

<400> 1205

acgcgttgcc attgaagact ggcaattaca cgatttacac atcattgatg ctgcagttga  
 60  
 tgtgcacagg gaaacactag ctaccgtgca gcaggaaatg atgggagaaa tcagccatgg  
 120  
 taacaagaac caagccatcc tggacacaga cggccgggggt tgtgcgaacg gaacgttagt  
 180  
 ctatcaatgt gttgcggaac gattcaaggg atgctggccc ccccatcac ttgcccaatc  
 240  
 aagatgtgga ggggaatctgt ctgctgcagaa cctggatctc gtggttgtac gacgttgctc  
 300

ccttctcgct cggacgccgc tcatgctccg ccacgtcgct gagcgagtga caaggtatcc  
 360  
 tgggaccatg cgtatgggtt caactgaagc gctggcgaat cgtaaan  
 407

<210> 1206  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 1206  
 Met Met Gly Glu Ile Ser His Gly Asn Lys Asn Gln Ala Ile Leu Asp  
 1 5 10 15  
 Thr Asp Gly Arg Gly Cys Ala Asn Gly Thr Leu Val Tyr Gln Cys Val  
 20 25 30  
 Ala Glu Arg Phe Lys Gly Cys Trp Pro Pro Pro Ser Leu Ala Gln Ser  
 35 40 45  
 Arg Cys Gly Gly Asn Leu Ser Ala Gln Asn Leu Asp Leu Val Val Val  
 50 55 60  
 Arg Arg Cys Pro Leu Leu Ala Arg Thr Pro Leu Met Leu Arg His Val  
 65 70 75 80  
 Ala Glu Arg Val Thr Arg Tyr Pro Gly Thr Met Arg Met Val Ser Thr  
 85 90 95  
 Glu Ala Leu Ala Asn Arg Lys  
 100

<210> 1207  
 <211> 292  
 <212> DNA  
 <213> Homo sapiens

<400> 1207  
 gctagcatgt cacttttttc ttcagtagat ggcactggag agacattgca ggatgaagag  
 60  
 gcttgcccttc attcctatgt gctttcccggt ccttgcttct ccagccatgt gtggggacaac  
 120  
 caggggtgct caccacctag tgagtttcag ggacactcca catgtcccag caagtcttat  
 180  
 cagcatctta gctggcttct caacaagact cagtggcacc cctgtggatg tctcccatca  
 240  
 agtttcatta gtgccccagg gggagactcc cagaaagttt cagcagcacc ac  
 292

<210> 1208  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

<400> 1208  
 Met Ser Leu Phe Ser Ser Val Asp Gly Thr Gly Glu Thr Leu Gln Asp  
 1 5 10 15  
 Glu Glu Ala Cys Leu His Ser Tyr Val Leu Ser Arg Pro Cys Phe Ser  
 20 25 30  
 Ser His Val Trp Asp Asn Gln Gly Cys Ser Pro Pro Ser Glu Phe Gln

		35					40					45						
Gly	His	Ser	Thr	Cys	Pro	Ser	Lys	Ser	Tyr	Gln	His	Leu	Ser	Trp	Leu			
	50					55					60							
Leu	Asn	Lys	Thr	Gln	Trp	His	Pro	Cys	Gly	Cys	Leu	Pro	Ser	Ser	Phe			
65					70					75					80			
Ile	Ser	Ala	Pro	Gly	Gly	Asp	Ser	Gln	Lys	Val	Ser	Ala	Ala	Pro				
				85					90					95				

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<210> 1209
<211> 431
<212> DNA
<213> Homo sapiens
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<400> 1209
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gccagtgaag ttattccggc aatatcaact attgtcgagt atgcctttac gccagcttct
120
gcgcaggggtg gttttgctgg tgcaacggta tggatggcga ttcg ttttgg tgttgcccg
180
ggtgtat tttt caaatgaggc aggttttaggt tcggcgccga tcgctcatgc cagtgcacaa
240
actaatgaac cggttcgcca agggttgggtg gcgatgttag gtactttcct tgatacactt
300
attatttgta caggtttagt gattgttatt tctggtgctt ggacagaagg attgtcgggt
360
gctgcgttaa catctgctgc atttaatctg gcgttacctg gttggggggg atacttagtc
420
gctatcagct g
431
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<210> 1210
<211> 143
<212> PRT
<213> Homo sapiens
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<400> 1210															
Leu	Val	Pro	Ile	Met	Ala	Val	Ala	Tyr	Ile	Phe	Ala	Gly	Ile	Ile	Ile
1				5					10					15	
Leu	Leu	Met	His	Ala	Ser	Glu	Val	Ile	Pro	Ala	Ile	Ser	Thr	Ile	Val
			20					25					30		
Glu	Tyr	Ala	Phe	Thr	Pro	Ala	Ser	Ala	Gln	Gly	Gly	Phe	Ala	Gly	Ala
		35					40					45			
Thr	Val	Trp	Met	Ala	Ile	Arg	Phe	Gly	Val	Ala	Arg	Gly	Val	Phe	Ser
	50					55					60				
Asn	Glu	Ala	Gly	Leu	Gly	Ser	Ala	Pro	Ile	Ala	His	Ala	Ser	Ala	Gln
65					70					75					80
Thr	Asn	Glu	Pro	Val	Arg	Gln	Gly	Leu	Val	Ala	Met	Leu	Gly	Thr	Phe
				85				90						95	
Leu	Asp	Thr	Leu	Ile	Ile	Cys	Thr	Gly	Leu	Val	Ile	Val	Ile	Ser	Gly
			100					105					110		
Ala	Trp	Thr	Glu	Gly	Leu	Ser	Gly	Ala	Ala	Leu	Thr	Ser	Ala	Ala	Phe
		115					120					125			
Asn	Leu	Ala	Leu	Pro	Gly	Trp	Gly	Gly	Tyr	Leu	Val	Ala	Ile	Ser	

130 135 140

<210> 1211  
 <211> 480  
 <212> DNA  
 <213> Homo sapiens

<400> 1211  
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 agagccgaag ctgtgcttct ccatgagatg gatgaagatg atctggccaa tgccttgatc  
 120  
 tggcctgaga ttcaacagga gctgaaaatc attgaatctg aggaggagct ctcatcgttg  
 180  
 ccacctcctg ctctgaagac cagcccaatt cagcctattc tcgagtcgag tctggggccc  
 240  
 ttattccct cagagcctcc tgggagcttg ccttgtggct ccttcctgc tccagtctcc  
 300  
 acccctctgg aggtgtggac tagggatcca gccaatcaga gcacacaggg ggcttccaca  
 360  
 gcagccagca gagagaagcc ggaacctgag cagggcctgc acccagacct cgccagcctg  
 420  
 gctcctctgg aaatagttcc ttttgagaag gcattctccag aggctggagt gtgctcgca  
 480

<210> 1212  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 1212  
 Glu Glu Gly Arg Glu Ala Gly Glu Met Glu Ser Ser Thr Leu Gln Glu  
 1 5 10 15  
 Ser Pro Arg Ala Arg Ala Glu Ala Val Leu Leu His Glu Met Asp Glu  
 20 25 30  
 Asp Asp Leu Ala Asn Ala Leu Ile Trp Pro Glu Ile Gln Gln Glu Leu  
 35 40 45  
 Lys Ile Ile Glu Ser Glu Glu Glu Leu Ser Ser Leu Pro Pro Pro Ala  
 50 55 60  
 Leu Lys Thr Ser Pro Ile Gln Pro Ile Leu Glu Ser Ser Leu Gly Pro  
 65 70 75 80  
 Phe Ile Pro Ser Glu Pro Pro Gly Ser Leu Pro Cys Gly Ser Phe Pro  
 85 90 95  
 Ala Pro Val Ser Thr Pro Leu Glu Val Trp Thr Arg Asp Pro Ala Asn  
 100 105 110  
 Gln Ser Thr Gln Gly Ala Ser Thr Ala Ala Ser Arg Glu Lys Pro Glu  
 115 120 125  
 Pro Glu Gln Gly Leu His Pro Asp Leu Ala Ser Leu Ala Pro Leu Glu  
 130 135 140  
 Ile Val Pro Phe Glu Lys Ala Ser Pro Glu Ala Gly Val Cys Ser Arg  
 145 150 155 160

<210> 1213  
 <211> 1141

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1213

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nntcatgatg gcggcctggt gtgtgggtat gtccacgatg ggcgcgtcac gcgtgtcgcc
60
cgtgatgctc aggggcgggt taccgggata gaggggccat cagggcggtg gagttacggc
120
tacaacgagg ctgggtcact catcagcgcg acggggcccc gcacacaaca taactggact
180
cacgacgcct atggccgggt caccagccac gccacatccg gaaccgacac caccttcgcc
240
tgggaccagg aaggccacct ggcgagacg tgtacgcgtg cacacgggca tgccactgcc
300
accagtatc gctatgacgc agcgggacgg cgcgtcagtg cgaccagctc agacggccag
360
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420
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540
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600
tggcgtgagg tcatgcccac cgacctgac aaccttacc agcccgccac ggccactatt
660
gaggggtgtc ccgagacgat caggatggcc gggaacacgc tagtggttga tggtcacct
720
tgggtggggg gcgcctctac gacccaacta ccaccacctt cttgtctcct gacccgtaa
780
ccccgcccgc cggcgcgcta tgggccaaac acccctacga ctacgccaac aacaaccccc
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900
cccaccccat cggcacactc gcacactacg tcgccaaactc cgtcagcaca ctcgtgcac
960
acatcaccga tcgatcagc cactggtggg ccaccacaa agaccggatc ctctcccggy
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1080
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1140
c
1141

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&lt;210&gt; 1214

&lt;211&gt; 259

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1214

```

Xaa His Asp Gly Gly Leu Val Cys Gly Tyr Val His Asp Gly Arg Val
 1             5             10             15
Thr Arg Val Ala Arg Asp Ala Gln Gly Arg Val Thr Gly Ile Glu Gly

```



			20					25					30				
Pro	Ser	Gly	Arg	Trp	Ser	Tyr	Gly	Tyr	Asn	Glu	Ala	Gly	Ser	Leu	Ile		
		35					40					45					
Ser	Ala	Thr	Gly	Pro	Arg	Thr	Gln	His	Asn	Trp	Thr	His	Asp	Ala	Tyr		
	50					55					60						
Gly	Arg	Leu	Thr	Ser	His	Ala	Thr	Ser	Gly	Thr	Asp	Thr	Thr	Phe	Ala		
65					70				75					80			
Trp	Asp	Gln	Glu	Gly	His	Leu	Ala	Gln	Thr	Cys	Thr	Arg	Ala	His	Gly		
			85					90					95				
His	Ala	Thr	Ala	Thr	Gln	Tyr	Arg	Tyr	Asp	Ala	Ala	Gly	Arg	Arg	Val		
		100					105					110					
Ser	Ala	Thr	Ser	Ser	Asp	Gly	Gln	Glu	Glu	Arg	Tyr	Ser	Trp	Asp	Gly		
	115					120					125						
Arg	Gly	Trp	Leu	Ser	Asp	Ile	Thr	Thr	Asp	Ala	Thr	Thr	Val	Ser	Thr		
	130					135					140						
His	Val	Asp	Ala	Leu	Gly	Arg	Ala	Ser	Arg	Ile	Thr	Thr	Lys	Gly	Gln		
145					150				155					160			
Gln	Val	Arg	Val	Asp	Trp	Asp	Leu	Val	Thr	Gly	Ala	Pro	Thr	Ser	Ile		
			165					170					175				
Asp	Gly	Arg	Pro	Val	Leu	Pro	Leu	Pro	Gly	Gly	Arg	Ile	Leu	Gly	Ala		
		180				185					190						
Thr	Pro	Ile	Gly	Asp	Thr	Asn	Leu	Trp	Arg	Glu	Val	Met	Pro	Thr	Asp		
	195					200					205						
Pro	Asp	Asn	Pro	Tyr	Gln	Pro	Ala	Thr	Ala	Thr	Ile	Glu	Gly	Val	Pro		
	210				215				220								
Glu	Thr	Ile	Arg	Met	Ala	Gly	Asn	Thr	Leu	Val	Val	Asp	Gly	His	Pro		
225					230				235					240			
Trp	Trp	Gly	Arg	Ala	Ser	Thr	Thr	Gln	Leu	Pro	Pro	Pro	Ser	Cys	Leu		
			245					250					255				

Leu Thr Arg

&lt;210&gt; 1215

&lt;211&gt; 317

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1215

acgcgttcgc tgcagatcga gtcgccggtg agctcgatct acctgtggat gtactacgtg  
60ggcgtgccga catccggcat cgggggggat cccaacctgc ttacctttta ttggaaccgc  
120ccccgggggtc aaccggcca tcaccgggag aacgccgctc ctccgagggg gtgttctcgc  
180agtcgccggc gtgggtgctg ggaagaagta ccgcggcacg accttcggcg ggctgctccc  
240gtcgtgtgcc ctccgctcgc tgctcgcgtt catcgtgctg aacaaggctg gctcggcgca  
300

gtacatcgcc tggatcn

317

&lt;210&gt; 1216

&lt;211&gt; 102

&lt;212&gt; PRT

<213> Homo sapiens

<400> 1216

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Met Tyr Cys Gly Glu Pro Thr Leu Phe Ser Thr Met Asn Ala Ser Thr
 1           5           10           15
Arg Pro Arg Asp Ser Asp Gly Ser Ser Pro Pro Lys Val Val Pro Arg
          20           25           30
Tyr Phe Phe His Ala Pro Thr Pro Ala Thr Ala Arg Thr Pro Pro Pro
          35           40           45
Arg Ser Gly Val Leu Pro Val Met Ala Gly Leu Thr Pro Gly Ala Val
          50           55           60
Pro Ile Lys Gly Lys Gln Val Gly Ile Pro Pro Asp Ala Gly Cys Arg
65           70           75           80
His Ala His Val Val His Pro Gln Val Asp Arg Ala His Arg Arg Leu
          85           90           95
Asp Leu Gln Arg Thr Arg
          100

```

<210> 1217

<211> 548

<212> DNA

<213> Homo sapiens

<400> 1217

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nacgcgtggg ttgacgcgct attaaacgat aagagcaaaa aaacatttcc tcatttatta
60
cgttgtcggg tgaatgatgt ttctggtgat agtcagtgga tagagatgcg aggcagtgtg
120
acagggttggg acagccgtca tcgagctcag atggtgagag ggacattcga gcgtattaac
180
catcttattg acgctgaaaa tgaattaatt gcggcccggtg aagatgctca gcgacgagag
240
cttattttat cggttttgct aaataatatt ccagaccctg tttggtctaa agatgaaagc
300
ggtcgttatt tggactgtaa ccatgcgttt tgtctgttta atggtttaga gcagagtgat
360
gttcaggggc aaaaagacag tgaattaaac ttagataata atgggtcaata ttatcaagat
420
atgggcggtg aggtattagc gcgaggggag atttttcatg aacattgttg gggtagcctt
480
gcagatggaa gtgacaaccg cttgtttgaa gtatatcgag tccctatcaa agagcctacc
540
gtgaattc
548

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<210> 1218

<211> 182

<212> PRT

<213> Homo sapiens

<400> 1218

```

Xaa Ala Trp Val Asp Ala Leu Leu Asn Asp Lys Ser Lys Lys Thr Phe
 1           5           10           15
Pro His Leu Leu Arg Cys Arg Val Asn Asp Val Ser Gly Asp Ser Gln

```



50		55		60											
Gly	Ala	Gly	Ala	Ser	Leu	Phe	Arg	Arg	Ala	Gln	Pro	Cys	Ser	Leu	Cys
65					70					75					80
Pro	Phe	Gly	Lys	Asp	Arg	Glu	Leu	Glu	Leu	Trp	Val	Gly	Gly	Gly	
				85					90					95	

<210> 1221  
 <211> 569  
 <212> DNA  
 <213> Homo sapiens

<400> 1221  
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 gcccgtccag gaaagctgca cctcagagaa gcagtttctt tccttacctg ggaagtttct  
 120  
 tctgtaacac gttaagcccc acaggtaagg cctgatcccc cctggacggc tcccctctcc  
 180  
 agtgttccca gtctggaggt antcttttct aagccatcct ctcagaatgt gatgggtacc  
 240  
 aggatgcaca cccggtggcc ctgtggtgtg aggcctcagc aaacacggtc agaagatgaa  
 300  
 cacacagaga cccgcccgtc ggaaggagag gagggagcgg atacggaggc ccacgtgcc  
 360  
 gaaggggtccc ttgcagtggg gtggttatgt gcctgcaatc ccagagtgtc ctcgaaggac  
 420  
 ctcagatcta acgagctcag ccggcagctg cacgtgggac cagccctctg agcttcactt  
 480  
 gttttcctct gtgccatcag aaaccaatac gaagataaaa tgggaaaaaa aaaaatccca  
 540  
 ttcacggcac agcctgccga gaaacgcgt  
 569

<210> 1222  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

<400> 1222  
 Met Asn Thr Gln Arg Pro Ala Arg Arg Lys Glu Arg Arg Glu Arg Ile  
 1 5 10 15  
 Arg Arg Pro Thr Cys Gln Lys Gly Pro Leu Gln Trp Cys Gly Tyr Val  
 20 25 30  
 Pro Ala Ile Pro Glu Cys Pro Arg Arg Thr Ser Asp Leu Thr Ser Ser  
 35 40 45  
 Ala Gly Ser Cys Thr Trp Asp Gln Pro Ser Glu Leu His Leu Phe Ser  
 50 55 60  
 Ser Val Pro Ser Glu Thr Asn Thr Lys Ile Lys Trp Glu Lys Lys Lys  
 65 70 75 80  
 Ser His Ser Arg His Ser Leu Pro Arg Asn Ala  
 85 90

<210> 1223  
 <211> 450

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1223

aagcttgctc aggctagtgc cgacgctgct gctctcaaac tcgtcgatgc ccaccggttg  
 60  
 ttgtgcgctc accgagaggg gccatacggg gtagacgagt ggtctcagcg catgggttact  
 120  
 gtactttcag atgtgttgcc tgggtgttggc caaggccggt gggttctcgg cgaaactgca  
 180  
 atagtaacgc ataacctcgc acaattggga gtcaataacg gtgattgcgg ggtcatcggt  
 240  
 gaaacaaggc ccgtccccac gatagctcta ccgggacccg gtggagtccc cagacgggtg  
 300  
 ccctgttccc tcatcccatc gctgcaaccc ttacaggcga tgacgattca caaagcgcag  
 360  
 ggcagccaat tcacggacgt aacggtggtc ctgccaccac ccgactcgcc cctcctctct  
 420  
 cgtgagttgc tctataaccg catcacgct  
 450

&lt;210&gt; 1224

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1224

Lys	Leu	Ala	Gln	Ala	Ser	Ala	Asp	Ala	Ala	Ala	Leu	Lys	Leu	Val	Asp
1			5					10						15	
Ala	His	Arg	Leu	Leu	Cys	Ala	His	Arg	Glu	Gly	Pro	Tyr	Gly	Val	Asp
			20					25						30	
Glu	Trp	Ser	Gln	Arg	Met	Val	Thr	Val	Leu	Ser	Asp	Val	Leu	Pro	Gly
			35					40						45	
Val	Gly	Gln	Gly	Arg	Trp	Val	Leu	Gly	Glu	Thr	Ala	Ile	Val	Thr	His
			50					55						60	
Asn	Leu	Ala	Gln	Leu	Gly	Val	Asn	Asn	Gly	Asp	Cys	Gly	Val	Ile	Val
65						70				75				80	
Glu	Thr	Arg	Pro	Val	Pro	Thr	Ile	Ala	Leu	Pro	Gly	Pro	Gly	Gly	Val
						85				90				95	
Pro	Arg	Arg	Leu	Pro	Cys	Ser	Leu	Ile	Pro	Ser	Leu	Gln	Pro	Leu	Gln
			100					105						110	
Ala	Met	Thr	Ile	His	Lys	Ala	Gln	Gly	Ser	Gln	Phe	Thr	Asp	Val	Thr
			115					120						125	
Val	Val	Leu	Pro	Pro	Pro	Asp	Ser	Pro	Leu	Leu	Ser	Arg	Glu	Leu	Leu
			130				135					140			
Tyr	Thr	Ala	Ile	Thr	Arg										
145							150								

&lt;210&gt; 1225

&lt;211&gt; 436

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1225

ncccatcccc caccgggat ggtgaacact gggatggcca cttgggagct caaagtgttg  
 60  
 tcagtgggag gacaaggtcc tcaattcctg gcacattggc ccagagaagt catgaaaacc  
 120  
 caaagcccc cgaaagtaag aagtagaaaa aaacccgacc ccgaccagat gaagggacct  
 180  
 gggaagtttt tggaaaagag actgctgaag tgtctccttg caggcatcac cgtgagctgg  
 240  
 ggctttgcac acagcatctt catggctttc cacaatgac ccagaactga tccagagaaa  
 300  
 cccagggatc aggggttgac ccgacctgt catcatccca ttctacaaat gaggacactg  
 360  
 aggcctgggtg aaaagggagg ggtggatgga accaggtggc ctggctctaa gaccagagg  
 420  
 ctggagtgtg ctcatg  
 436

<210> 1226

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1226

Met	Val	Asn	Thr	Gly	Met	Ala	Thr	Trp	Glu	Leu	Lys	Val	Leu	Ser	Val
1				5					10					15	
Gly	Gly	Gln	Gly	Pro	Gln	Phe	Leu	Ala	His	Trp	Pro	Arg	Glu	Val	Met
			20					25					30		
Lys	Thr	Gln	Ser	Pro	Pro	Lys	Val	Arg	Ser	Arg	Lys	Lys	Pro	Asp	Pro
		35					40					45			
Asp	Gln	Met	Lys	Gly	Pro	Gly	Lys	Phe	Leu	Glu	Lys	Arg	Leu	Leu	Lys
	50					55					60				
Cys	Leu	Leu	Ala	Gly	Ile	Thr	Val	Ser	Trp	Gly	Phe	Ala	His	Ser	Ile
65					70					75				80	
Phe	Met	Ala	Phe	His	Asn	Asp	Pro	Arg	Thr	Asp	Pro	Glu	Lys	Pro	Arg
				85				90						95	
Asp	Gln	Gly	Leu	Thr	Arg	Pro	Cys	His	His	Pro	Ile	Leu	Gln	Met	Arg
		100					105					110			
Thr	Leu	Arg	Pro	Gly	Glu	Lys	Gly	Gly	Val	Asp	Gly	Thr	Arg	Trp	Pro
		115				120					125				
Gly	Ser	Lys	Thr	Gln	Arg	Leu	Glu	Cys	Ala	His					
	130					135									

<210> 1227

<211> 756

<212> DNA

<213> Homo sapiens

<400> 1227

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 aatggtattg gaataccgat taacaaggta gataaaatct ttgatagatt ctaccgtgtc  
 120  
 gacaaagcac gtacacgtaa gatgggagggt acaggactag gtctagctat ttccaaagag  
 180

attgtcgaag cacataatgg ccgtatttgg gcaaatagtg tcgaaggaca aggtacatct  
 240  
 atcttcatta ccctaccatg tgaaattatt gaagatgggtg attgggatga atagtaaaga  
 300  
 atacatcaaa acgattatcc tgatactact tgtattaatg agtatcgtct taacctacat  
 360  
 ggtatggaac ttctcacctg atctatcaaa tgctgatagt acgtcatcag ataataagaa  
 420  
 agataattct aaacctattg gaaaaccaat gagtgcgaaa acggataaaa ccatcacacc  
 480  
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 540  
 agtatctcaa attttaagcc cattaaaaga taaaaatggt gattcagtag aacatttaaa  
 600  
 acgaaatcat aacttaatta ttctgaatt aagtataac tttatcgttc ttgatttcac  
 660  
 atatgattta ccgttatcaa ttacttaag ccaagtatta aacatagatg ctaagacacc  
 720  
 taatcatttt aactttaatc gactactgat tgatca  
 756

<210> 1228

<211> 97

<212> PRT

<213> Homo sapiens

<400> 1228

Val	Glu	Phe	His	Val	Lys	Gln	Asn	Ala	Leu	Tyr	Asn	Arg	Met	Thr	Ile
1				5					10					15	
Arg	Ile	Lys	Asp	Asn	Gly	Ile	Gly	Ile	Pro	Ile	Asn	Lys	Val	Asp	Lys
			20					25					30		
Ile	Phe	Asp	Arg	Phe	Tyr	Arg	Val	Asp	Lys	Ala	Arg	Thr	Arg	Lys	Met
			35				40					45			
Gly	Gly	Thr	Gly	Leu	Gly	Leu	Ala	Ile	Ser	Lys	Glu	Ile	Val	Glu	Ala
			50				55				60				
His	Asn	Gly	Arg	Ile	Trp	Ala	Asn	Ser	Val	Glu	Gly	Gln	Gly	Thr	Ser
65					70				75					80	
Ile	Phe	Ile	Thr	Leu	Pro	Cys	Glu	Ile	Ile	Glu	Asp	Gly	Asp	Trp	Asp
				85					90					95	

Glu

<210> 1229

<211> 377

<212> DNA

<213> Homo sapiens

<400> 1229

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 cttgtcgccc ccatggcaaa ccaggggggtc gaggccactg gagcgtatggg aaccgacacc  
 120  
 ccgctggccg tgctatctaa ctgtccgcgg atgctctggg actatttcag tcagcttttc  
 180

getcaggttaa ccaatccgcc cttggacgct atccgcgagg agcttggtcac ctccctgacg  
 240  
 ggcaccatcg gcccgaggc gaacttgctt gagcctggcc cggaatcatg tcggcaagtg  
 300  
 gtcgtcaact acccgatcat cgattccgac cagcttgcca agatcattca catcgacgct  
 360  
 gacggggagc atccgga  
 377

<210> 1230

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1230

Thr	Arg	Arg	Gln	Gln	Leu	Phe	Gly	Tyr	Thr	Ser	Glu	Glu	Pro	Lys	Met
1				5					10					15	
Leu	Val	Ala	Pro	Met	Ala	Asn	Gln	Gly	Val	Glu	Ala	Thr	Gly	Ala	Met
			20					25					30		
Gly	Thr	Asp	Thr	Pro	Leu	Ala	Val	Leu	Ser	Asn	Cys	Pro	Arg	Met	Leu
		35					40					45			
Trp	Asp	Tyr	Phe	Ser	Gln	Leu	Phe	Ala	Gln	Val	Thr	Asn	Pro	Pro	Leu
	50					55					60				
Asp	Ala	Ile	Arg	Glu	Glu	Leu	Val	Thr	Ser	Leu	Thr	Gly	Thr	Ile	Gly
65					70					75				80	
Pro	Glu	Ala	Asn	Leu	Leu	Glu	Pro	Gly	Pro	Glu	Ser	Cys	Arg	Gln	Val
			85					90					95		
Val	Val	Asn	Tyr	Pro	Ile	Ile	Asp	Ser	Asp	Gln	Leu	Ala	Lys	Ile	Ile
			100				105						110		
His	Ile	Asp	Ala	Asp	Gly	Glu	His	Pro							
		115					120								

<210> 1231

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1231

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 cggaagtaag gagtttttat ggcgggttta atcaccggag acgccgggta tatcggttct  
 120  
 cacactgttc tggccttggtt agaacatggc gaagatgttg tagtggttaga taatttatca  
 180  
 aactcttccg atgagttctt gcgtcgcgtt gagaaactcg cgggtagaag tgctcagttc  
 240  
 taccaaggcg atatcttgga tgctgagtggt ctgcatcgca tcttcgaggc tcacgacatc  
 300  
 tcggctgtga tccattttgc tgggctaaag ggtgtcggag agtcgacgcg t  
 351

<210> 1232

<211> 91

<212> PRT



<213> Homo sapiens

<400> 1232

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Met Ala Val Leu Ile Thr Gly Asp Ala Gly Tyr Ile Gly Ser His Thr
 1           5           10           15
Val Leu Ala Leu Leu Glu His Gly Glu Asp Val Val Val Leu Asp Asn
          20           25           30
Leu Ser Asn Ser Ser Asp Glu Ser Leu Arg Arg Val Glu Lys Leu Ala
          35           40           45
Gly Arg Ser Ala Gln Phe Tyr Gln Gly Asp Ile Leu Asp Ala Glu Cys
          50           55           60
Leu His Arg Ile Phe Glu Ala His Asp Ile Ser Ala Val Ile His Phe
65           70           75           80
Ala Gly Leu Lys Gly Val Gly Glu Ser Thr Arg
          85           90

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<210> 1233

<211> 4982

<212> DNA

<213> Homo sapiens

<400> 1233

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nnggcttaag cagtggtaac aacgcagagt acgcgggggtg atggcctccc tgaaattaa
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catttctatt agtggcttcc cgtaaatctc atccttctta gatcaaacct cgttatatct
120
cctgcctatc tcttttgcac tccaaagtcc agttttatta aatcccaggg tctaagattt
180
tttctttgag aatttatctc cagtgtttct atggaaatta aaaaagaaaa ttaggataat
240
tcaatgtcga aatgttgcac gcatcttttg agaaatttat atttttagg ttgaaggact
300
tgcttttttg gcagcgtatt tttggagggtg gaatgtagtt attttaataa ccatgtccta
360
attatttata gcttctgcc tgacacagct cacttcaaga agtgcacaat gtcagaacgt
420
ggaattaagt gggcttgtga atattgtacg tatgaaaact ggccatctgc aatcaagtgt
480
accatgtgtc gtgcccagg acctagtggg acaattatta cagaagatcc atttaaaagt
540
ggttcaagtgt atgttggtag agattgggat ccttccagca ccgaaggagg aagtagtcct
600
ttgatatgtc cagactctag tgcaagacca agggtgaaat cttcgtatag catggaaaat
660
gcaaataagt ggtcatgcca catgtgtaca tatttgaact ggccaagagc aatcagatgt
720
accagtgtc tatcccaacg taggaccagg agtcctacag aatctcctca gtcctcagga
780
tctggctcaa gaccagtgtc tttttctgtt gatccttgtg aggaatacaa tgatagaaat
840
aaactgaaca ctaggacaca gactgggact tgctctgttt gcacatatga aaactgggcc
900
aaggctaaaa gatgtgttgt ttgtgatcat ccagaccta ataacattga agcaatagaa
960

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ttggcagaga ctgaagagggc ttcttcaata ataaatgagc aagacagagc tcgatggagg  
1020  
ggaagtgtga gtagtggttaa tagccaaagg agatcacctc ctgctacgaa gcgggactct  
1080  
gaagtgaata tggattttca gaggattgaa ttggctgggtg ctgtgggaag caaggaggaa  
1140  
cttgaagtag actttaaaaa actaaagcaa attaaaaaca ggatgaaaaa gactgattgg  
1200  
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1260  
aagtcacgag gaggagacat tgcacgtcag ctccaccgag atgaagtacg cttgctgaat  
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1440  
gcaatgggtgt gtcctgaact gacagaacaa atccggagag agatagctgc ctctcttcat  
1500  
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&lt;210&gt; 1234

&lt;211&gt; 708

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1234

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          35             40             45
Val Gly Arg Asp Trp Asp Pro Ser Ser Thr Glu Gly Gly Ser Ser Pro
          50             55             60
Leu Ile Cys Pro Asp Ser Ser Ala Arg Pro Arg Val Lys Ser Ser Tyr
        65             70             75             80
Ser Met Glu Asn Ala Asn Lys Trp Ser Cys His Met Cys Thr Tyr Leu
          85             90             95
Asn Trp Pro Arg Ala Ile Arg Cys Thr Gln Cys Leu Ser Gln Arg Arg
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Thr Arg Ser Pro Thr Glu Ser Pro Gln Ser Ser Gly Ser Gly Ser Arg
          115            120            125
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Lys Leu Asn Thr Arg Thr Gln His Trp Thr Cys Ser Val Cys Thr Tyr

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Ser	Lys	Glu	Glu	Leu	Glu	Val	Asp	Phe	Lys	Lys	Leu	Lys	Gln	Ile	Lys
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Asn	Arg	Met	Lys	Lys	Thr	Asp	Trp	Leu	Phe	Leu	Asn	Ala	Cys	Val	Gly
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Val	Val	Glu	Gly	Asp	Leu	Ala	Ala	Ile	Glu	Ala	Tyr	Lys	Ser	Ser	Gly
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Arg	Pro	Ser	Ala	Phe	Asp	Val	Gly	Tyr	Thr	Leu	Val	His	Leu	Ala	Ile
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Arg	Phe	Gln	Arg	Gln	Asp	Met	Leu	Ala	Ile	Leu	Leu	Thr	Glu	Val	Ser
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Glu	Val	Leu	Asp	Arg	Asp	Val	Gln	Lys	Glu	Leu	Glu	Glu	Glu	Ser	Pro
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His	Pro	Leu	Val	Thr	Gln	Met	Val	Glu	Lys	Trp	Leu	Asp	Arg	Tyr	Arg
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Gln	Ile	Arg	Pro	Cys	Thr	Ser	Leu	Ser	Asp	Gly	Glu	Glu	Asp	Glu	Asp
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705															

&lt;210&gt; 1235

&lt;211&gt; 383

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1235

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383

&lt;210&gt; 1236

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1236

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Gly	Met	Gln	Ala	Ile	Ala	Glu	His	Glu	His	Glu	Leu	Ala	Ala	Arg	Met
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Leu	Glu	Asp	Tyr	Gln	Thr	Val	Lys	Gly	Val	Gln	Pro	Glu	Arg	Gly	
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&lt;210&gt; 1237

&lt;211&gt; 1608

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1237

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<210> 1238

<211> 458

<212> PRT

<213> Homo sapiens

<400> 1238

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Phe	Pro	Glu	Leu	Gln	Leu	Pro	Val	Ser	Pro	Ser	Val	Cys	Leu	Asp	Gln	35	40	45	
Gly	Met	Gln	Leu	Lys	Pro	Ser	Thr	Ser	Ser	His	Leu	Leu	Lys	Thr	Val	50	55	60	
Lys	Pro	Arg	Val	Trp	Lys	Pro	Gly	Asp	Trp	Ser	Arg	Glu	Gln	Leu	Asn	65	70	75	80
Glu	Thr	Thr	Val	Leu	Ala	Pro	His	Glu	Thr	Ile	Phe	Arg	Ala	Lys	Asp	85	90	95	
Leu	Ser	Val	Ile	Leu	Lys	Ala	Tyr	Val	Leu	Val	Thr	Ser	Leu	Thr	Pro	100	105	110	
Leu	Arg	Ala	Phe	Ile	His	Ser	Thr	Gly	Thr	Val	Trp	Asn	Pro	Pro	Lys	115	120	125	
Lys	Lys	Arg	Phe	Thr	Val	Lys	Leu	Gln	Thr	Phe	Phe	Glu	Thr	Phe	Leu	130	135	140	
Arg	Ala	Ser	Ser	Pro	Gln	Gln	Ala	Phe	Asp	Ile	Met	Lys	Glu	Ala	Ile	145	150	155	160
Gly	Lys	Leu	Leu	Leu	Ala	Ala	Glu	Val	Phe	Ser	Glu	Thr	Ser	Thr	Leu	165	170	175	
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Phe	Asp	Ile	Gly	Tyr	Gly	Ser	Phe	Met	Tyr	Pro	Val	Val	Leu	Gln	Val	195	200	205	
His	Glu	His	Leu	Asn	Phe	Gln	Asp	Tyr	Asp	Asn	Met	Asp	Phe	Glu	Asp	210	215	220	
Gln	Asn	Thr	Glu	Glu	Phe	Leu	Leu	Asn	Asp	Thr	Phe	Asn	Phe	Leu	Phe	225	230	235	240
Pro	Asn	Glu	Ser	Ser	Leu	Ser	Ile	Phe	Ser	Glu	Ile	Phe	Gln	Arg	Leu	245	250	255	
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<210> 1239

<211> 447

&lt;212&gt; DNA

<213> Homo sapiens

<400> 1239

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ggtcaaatgg atagccctac acagatatTT gagcatgtgt tcttgggctc agaatggaat  
240

gcctccaact tagaggactt acagaaccga ggggtacggt atatcttgaa tgtcactcga  
300

gagatagata actttttccc aggagtcctt gagtatcata acattcgggt atatgatgaa  
360

gaggcaacgg atctcctggc gtactggaat gacacttaca aattcatctc taaagcaaag  
420

aaacatggat ctaaatgcct tgtgcac  
447

<210> 1240

<211> 149

&lt;212&gt; PRT

<213> Homo sapiens

&lt;400&gt; 1240

```

Ile Pro Thr Glu Arg Glu Arg Thr Glu Arg Leu Ile Lys Thr Lys Leu
 1             5             10             15
Arg Glu Ile Met Met Gln Lys Asp Leu Glu Asn Ile Thr Ser Lys Glu
      20             25             30
Ile Arg Thr Glu Leu Glu Met Gln Met Val Cys Asn Leu Arg Glu Phe
      35             40             45
Lys Glu Phe Ile Asp Asn Glu Met Ile Val Ile Leu Gly Gln Met Asp
      50             55             60
Ser Pro Thr Gln Ile Phe Glu His Val Phe Leu Gly Ser Glu Trp Asn
65             70             75             80
Ala Ser Asn Leu Glu Asp Leu Gln Asn Arg Gly Val Arg Tyr Ile Leu
      85             90             95
Asn Val Thr Arg Glu Ile Asp Asn Phe Phe Pro Gly Val Phe Glu Tyr
      100            105            110
His Asn Ile Arg Val Tyr Asp Glu Glu Ala Thr Asp Leu Leu Ala Tyr
      115            120            125
Trp Asn Asp Thr Tyr Lys Phe Ile Ser Lys Ala Lys Lys His Gly Ser
      130            135            140
Lys Cys Leu Val His
145

```

&lt;210&gt; 1241

&lt;211&gt; 489

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1241

```

acgcgtgtgc agcgtatcca gcaccgtcct cagaataata gctgtgaaaa ggaggaaggg
60
aactaggcag acagaccgac agataggggg aaaccgggat gtttaatgtg tccgaacaag
120
taggaagatc aatgaggcgc gagtgtgtgt gtgtacgtgt gcgcgtgtgt gtgtgagaga
180
gagagaaaga aagaagaaag gtcccgattg caacgtgtca gatcttgcaa cttccccccc
240
accaacaca acaaccctca gacacaaaaa caccattgct gactgatacc ccaggtcttc
300
agggttaaag gaaccgtgtg ttggcagcgc aattgtgcag acgctgtaag gccaaaacga
360
ggatttgtgt tgtgaggtcg gtggtgcgtt cttttctttc ttttctcgcc tgttttcccg
420
gagtgcctgg gttgcgagaa aggcgcatcg caggctgtgc agccgaatcg cttcgcaatt
480
attcatgct
489

```

&lt;210&gt; 1242

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1242

```

Met Asn Asn Cys Glu Ala Ile Arg Leu His Ser Leu Arg Cys Ala Phe

```

```

      1             5             10             15
Leu Ala Thr Gln Ala Leu Arg Glu Asn Arg Arg Glu Glu Lys Glu Lys
      20             25             30
Asn Ala Pro Pro Thr Ser Gln His Lys Ser Ser Phe Trp Pro Tyr Ser
      35             40             45
Val Cys Thr Ile Ala Leu Pro Thr His Gly Ser Phe Asn Pro Glu Asp
      50             55             60
Leu Gly Tyr Gln Ser Ala Met Val Phe Leu Cys Leu Arg Val Val Val
      65             70             75             80
Leu Gly Gly Gly Lys Val Ala Arg Ser Asp Thr Leu Gln Ser Gly Pro
      85             90             95
Phe Phe Phe Leu Ser Leu Ser Leu Thr His Thr Arg Ala His Val His
      100             105             110
Thr His Thr Arg Ala Ser Leu Ile Phe Leu Leu Val Arg Thr His
      115             120             125

```

<210> 1243

<211> 390

<212> DNA

<213> Homo sapiens

<400> 1243

```

ntagactccg tcgatcccct catggagaat ccagtgtgcc aggtcccttc ggcgtactgg
60
gagatgatat acctaccggg aatgttcact gtctacttcg atggccagtt ctgggtcgga
120
gtcctagaga ggcgcgacga gggtttggtg cgtgccgtaa aagtcacggt tggcgccgaa
180
ccgtctgaca cggaattgta cgggtggggt agccgtcatg gcaacgcact tatagagcga
240
ttggagtcta ccgctgctgt ccctaccacc cgcagtcctcc gagccaagcg actgaacccc
300
aagagggcgt tacgagatgc agcgcgagct gcccaagcac accgtgccag cacgnccgca
360
caggccgcga ttaaggccga tcaggaagct
390

```

<210> 1244

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1244

```

Xaa Asp Ser Val Asp Pro Leu Met Glu Asn Pro Val Cys Gln Val Pro
      1             5             10             15
Ser Ala Tyr Trp Glu Met Ile Tyr Leu Pro Gly Met Phe Thr Val Tyr
      20             25             30
Phe Asp Gly Gln Phe Trp Val Gly Val Leu Glu Arg Arg Asp Glu Gly
      35             40             45
Leu Val Arg Ala Val Lys Val Thr Phe Gly Ala Glu Pro Ser Asp Thr
      50             55             60
Glu Leu Tyr Gly Trp Val Ser Arg His Gly Asn Ala Leu Ile Glu Arg
      65             70             75             80
Leu Glu Ser Thr Ala Ala Val Pro Thr Thr Arg Ser Pro Arg Ala Lys

```

```

      85              90              95
Arg Leu Asn Pro Lys Arg Ala Leu Arg Asp Ala Ala Arg Ala Ala Gln
      100              105              110
Ala His Arg Ala Ser Thr Xaa Ala Gln Ala Ala Ile Lys Ala Asp Gln
      115              120              125
Glu Ala
      130

```

<210> 1245  
 <211> 339  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1245
gccaaagcagc aaaaaccaca gatcattgct atgggaaatg tgtcattttc ttgttcacaa
60
ccacaatcta tgcccgtgac ttttctgagc tccaggagtt ttttagcact gccagacttc
120
tctggagagg aggaggtttc tgccactttt caatttcgaa cttggaataa ggcagggctt
180
ctgctgttca gtgaacttca gctgatttca gggggtatcc tcctctttct gagtgatgga
240
aaacttaagt cgaatctcta ccagccaaga aaattaccca gtgacatcac agcaggtgtc
300
gaattaaatg atgggcagtg gcattctgtc tctttatct
339

```

<210> 1246  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1246
Ala Lys Gln Gln Lys Pro Gln Ile Ile Ala Met Gly Asn Val Ser Phe
  1              5              10              15
Ser Cys Ser Gln Pro Gln Ser Met Pro Val Thr Phe Leu Ser Ser Arg
      20              25              30
Ser Phe Leu Ala Leu Pro Asp Phe Ser Gly Glu Glu Glu Val Ser Ala
      35              40              45
Thr Phe Gln Phe Arg Thr Trp Asn Lys Ala Gly Leu Leu Leu Phe Ser
      50              55              60
Glu Leu Gln Leu Ile Ser Gly Gly Ile Leu Leu Phe Leu Ser Asp Gly
65              70              75              80
Lys Leu Lys Ser Asn Leu Tyr Gln Pro Arg Lys Leu Pro Ser Asp Ile
      85              90              95
Thr Ala Gly Val Glu Leu Asn Asp Gly Gln Trp His Ser Val Ser Leu
      100              105              110
Ser

```

<210> 1247  
 <211> 366  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1247

ttgacctcca acccgggcac gcgcatacctg cccagatcc cgatggatgg gcatgacctc  
 60  
 aaccgggtgt ggcgggacgt cggcctgac gtgcaccgc cgatgctcta catgggctac  
 120  
 gtcggtttct ccgtggcctt tgcgtttgcc atcgccgcct tgctcggcgg gcgcctcgat  
 180  
 gcggcctggg cgcgctggtc gcggccatgg accattgtgg cctgggcgtt cctcggatc  
 240  
 ggtatcacc cgggttcgtg gtgggcctac tacgaactcg gctggngcgg ctggtggttc  
 300  
 tgggaccccg gggaaaacc cttcttcattg ccctggctgg ggggcacccc gctgattcac  
 360  
 tcgctg  
 366

&lt;210&gt; 1248

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1248

Leu	Thr	Ser	Asn	Pro	Gly	Thr	Arg	Ile	Leu	Pro	Gln	Ile	Pro	Met	Asp
1				5					10					15	
Gly	His	Asp	Leu	Asn	Pro	Val	Trp	Arg	Asp	Val	Gly	Leu	Ile	Val	His
			20					25					30		
Pro	Pro	Met	Leu	Tyr	Met	Gly	Tyr	Val	Gly	Phe	Ser	Val	Ala	Phe	Ala
		35				40						45			
Phe	Ala	Ile	Ala	Ala	Leu	Leu	Gly	Gly	Arg	Leu	Asp	Ala	Ala	Trp	Ala
	50					55					60				
Arg	Trp	Ser	Arg	Pro	Trp	Thr	Ile	Val	Ala	Trp	Ala	Phe	Leu	Gly	Ile
65					70					75				80	
Gly	Ile	Thr	Leu	Gly	Ser	Trp	Trp	Ala	Tyr	Tyr	Glu	Leu	Gly	Trp	Xaa
			85					90						95	
Gly	Trp	Trp	Phe	Trp	Asp	Pro	Gly	Glu	Asn	Pro	Phe	Phe	Met	Pro	Trp
			100					105						110	
Leu	Gly	Gly	Thr	Pro	Leu	Ile	His	Ser	Leu						
		115					120								

&lt;210&gt; 1249

&lt;211&gt; 374

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1249

acgcgtgtcc tcaacaccct ggcgcccacg ctgattgccg tggaaccggt gccggcaatg  
 60  
 ggcgcgacgt tgagcaagct gctgccggat gtgcacctgg tcaatggcac tgccgagggc  
 120  
 attccactgg aaagcgccgt ggcggtatgcg gtggtgtgcg cacaagcctt ccattggttt  
 180  
 tccagcgagg cggccctggc ggaaatccat cgggtactca aaccggatgg gcgcctgggg  
 240

ctgggtgtgga atgtgcgcgga cgagtcgggtg gattggggtcg ccgccattac tcaaatacatc  
 300  
 acgccttatg aaggcgacac gccgcgcttt cataccggcc gttggcgcgga agccttcact  
 360  
 ggcgagtatt ttg  
 374

<210> 1250  
 <211> 124  
 <212> PRT  
 <213> Homo sapiens

<400> 1250  
 Thr Arg Val Leu Asn Thr Leu Ala Pro Thr Leu Ile Ala Val Glu Pro  
 1 5 10 15  
 Val Pro Ala Met Gly Ala Gln Leu Ser Lys Leu Leu Pro Asp Val His  
 20 25 30  
 Leu Val Asn Gly Thr Ala Glu Ala Ile Pro Leu Glu Ser Ala Val Ala  
 35 40 45  
 Asp Ala Val Val Cys Ala Gln Ala Phe His Trp Phe Ser Ser Glu Ala  
 50 55 60  
 Ala Leu Ala Glu Ile His Arg Val Leu Lys Pro Asp Gly Arg Leu Gly  
 65 70 75 80  
 Leu Val Trp Asn Val Arg Asp Glu Ser Val Asp Trp Val Ala Ala Ile  
 85 90 95  
 Thr Gln Ile Ile Thr Pro Tyr Glu Gly Asp Thr Pro Arg Phe His Thr  
 100 105 110  
 Gly Arg Trp Arg Glu Ala Phe Thr Gly Glu Tyr Phe  
 115 120

<210> 1251  
 <211> 742  
 <212> DNA  
 <213> Homo sapiens

<400> 1251  
 accggtctct tctcggaaa ggcagggccg aggggcttgc ggggcagcca tggaggcgac  
 60  
 gcggaggcgg cagcacgtgg gagcgacggg cggcccaggc gcgcagttgg gcgcctcctt  
 120  
 ccctgcaggc caggcatggc tctgtgagcg ctgatgaggc tgcccgcacg gctcccttcc  
 180  
 acctcgacct ctggttctac ttcacactgc agaactgggt tctggacttt gggcgctcca  
 240  
 ttgccatgct ggtattccct ctcgagtggg ttccactcaa caagcccagt gttggggact  
 300  
 acttccacat ggcctacaac gtcatcacgc cctttctctt gctcaagctc atcgagcggg  
 360  
 cccccgcac cctgctacgc tccatcacgt acgtgagcat catcatcttc atcatgggtg  
 420  
 ccagcatcca cctggtgggt gactctgtca accaccgcct gctcttcagt ggctaccagc  
 480  
 accacctgtc tgtccgtgag aaccccatca tcaagaatct caagccggag acgctgatcg  
 540

actcctttga gctgctctac tattatgatg agtacctggg tcaactgcatg tggtagatcc  
 600  
 ccttcttcct catcctcttc atgtacttca gcggctgctn ttactgcctc taaagctgag  
 660  
 agcttgattc cagggcctgc cctgctcctg gtggcaccca gtggcctgta ctactggtac  
 720  
 ctggtcaccg agggccagat ct  
 742

<210> 1252

<211> 80

<212> PRT

<213> Homo sapiens

<400> 1252

Met	Arg	Leu	Pro	Ala	Arg	Leu	Pro	Ser	Thr	Ser	Thr	Ser	Gly	Ser	Thr
1				5					10					15	
Ser	His	Cys	Arg	Thr	Gly	Phe	Trp	Thr	Leu	Gly	Val	Pro	Leu	Pro	Cys
			20					25					30		
Trp	Tyr	Ser	Leu	Ser	Ser	Gly	Phe	His	Ser	Thr	Ser	Pro	Val	Leu	Gly
		35				40						45			
Thr	Thr	Ser	Thr	Trp	Pro	Thr	Thr	Ser	Ser	Arg	Pro	Phe	Ser	Cys	Ser
	50					55					60				
Ser	Ser	Ser	Ser	Gly	Pro	Pro	Ala	Pro	Cys	Tyr	Ala	Pro	Ser	Arg	Thr
65					70					75					80

<210> 1253

<211> 675

<212> DNA

<213> Homo sapiens

<400> 1253

gggccccctc ccaggcgctt tctgggagct tttagaactg cgctctgaag tttccagaga  
 60  
 gcgaggagct tttgcggcag gcagagacaa tggaagaaaa tgaaagccag aaatgtgagc  
 120  
 cgtgccttcc ttactcagca gacagaagac agatgcagga acaaggcaaa ggcaatctgc  
 180  
 atgtaacatc accagaagat gcagaatgcc gcagaaccaa ggaacgcctt tctaattggaa  
 240  
 acagtctggtt ttcagtttcc aagtcttccc gcaatatccc aaggagacac accctagggg  
 300  
 ggccccgaag ttccaaggaa atactgggaa tgcaaacatc tgagatggat cggaagagag  
 360  
 gaaaaagcgt tcctagaaca tctgaagcag aagtaccccc accacgcctc tgcaatcatg  
 420  
 ggtcaccaag agaggctgag agaccagaca aggatcccca aactgtctca cagtcctcaa  
 480  
 ccaccagtg tgggtgaccc ggtcgagcat ttatcagaga cgtccgctga ttctttggaa  
 540  
 gccatgtctg agggggatgc tccaaccct tttccagag gcagccggac tcgtgcgagc  
 600  
 cttctgtggt tgaggtaaac caaccagacg aaagaaagat ctctgggggt tctctatctc  
 660

cagtatggag atgaa  
675

<210> 1254  
<211> 86  
<212> PRT  
<213> Homo sapiens

<400> 1254  
Met Gly His Gln Glu Arg Leu Arg Asp Gln Thr Arg Ile Pro Lys Leu  
1 5 10 15  
Ser His Ser Pro Gln Pro Pro Ser Val Gly Asp Pro Val Glu His Leu  
20 25 30  
Ser Glu Thr Ser Ala Asp Ser Leu Glu Ala Met Ser Glu Gly Asp Ala  
35 40 45  
Pro Thr Pro Phe Ser Arg Gly Ser Arg Thr Arg Ala Ser Leu Pro Val  
50 55 60  
Val Arg Ser Thr Asn Gln Thr Lys Glu Arg Ser Leu Gly Val Leu Tyr  
65 70 75 80  
Leu Gln Tyr Gly Asp Glu  
85

<210> 1255  
<211> 401  
<212> DNA  
<213> Homo sapiens

<400> 1255  
ncgccgatta ccaaggctat ggatgtgtgg gccttgggcg taacgctata ctgtctgctg  
60  
ttcgggtcgag tgccatttga tgcagagacg gagtacttgc tgctggaaag tatcctgcat  
120  
gacgattatg ccgtccccgac gcacatgggt agcgaccgcg tgttggtagg cccgcgacca  
180  
gcacgttggc cctcgtcgca agagacgccc aacgtgccgc tgtccggcga ggcgcatgca  
240  
gtacgccatc tgctcgatgc ctttctcgac aaggatccag cgacgcgcct cactctcgat  
300  
cgtgttataa cacacccatg gctcgtggca gagtcattgt aatagtagca attgtatata  
360  
ccctcatcac caagatggcc aaagcggtag aaggcccgcg g  
401

<210> 1256  
<211> 113  
<212> PRT  
<213> Homo sapiens

<400> 1256  
Xaa Pro Ile Thr Lys Ala Met Asp Val Trp Ala Leu Gly Val Thr Leu  
1 5 10 15  
Tyr Cys Leu Leu Phe Gly Arg Val Pro Phe Asp Ala Glu Thr Glu Tyr  
20 25 30  
Leu Leu Leu Glu Ser Ile Leu His Asp Asp Tyr Ala Val Pro Thr His



```

          35          40          45
Met Gly Ser Asp Arg Val Leu Val Gly Pro Arg Pro Ala Arg Trp Pro
   50          55          60
Ser Ser Gln Glu Thr Pro Asn Val Pro Leu Ser Gly Glu Ala His Ala
65          70          75          80
Val Arg His Leu Leu Asp Ala Leu Leu Asp Lys Asp Pro Ala Thr Arg
          85          90          95
Leu Thr Leu Asp Arg Val Ile Thr His Pro Trp Leu Val Ala Glu Ser
          100          105          110
Trp

```

&lt;210&gt; 1257

&lt;211&gt; 294

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1257

```

cgcgtagacagc tgattgaagg tgatgtcgcc aacgccgacc tggaggcgca agccgccatc
60
ggcgccacgg cggtggtgca tttggcagcg gtggcttcgg tgcaagcctc ggtggatgac
120
ccggtcagca cgcgccagag caattttgtc ggcaccttga atgtctgcga agccatgcgc
180
aaggccggtg tgaagcgtgt ggtatttgc tccagcgttg cggtgtatgg caacaatggc
240
gagggcgctt cgattgacga agagaccatc aaggccccgc tgacgcctta cgcg
294

```

&lt;210&gt; 1258

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1258

```

Arg Val Gln Leu Ile Glu Gly Asp Val Ala Asn Ala Asp Leu Val Ala
 1          5          10          15
Gln Ala Ala Ile Gly Ala Thr Ala Val Val His Leu Ala Ala Val Ala
          20          25          30
Ser Val Gln Ala Ser Val Asp Asp Pro Val Ser Thr Arg Gln Ser Asn
          35          40          45
Phe Val Gly Thr Leu Asn Val Cys Glu Ala Met Arg Lys Ala Gly Val
          50          55          60
Lys Arg Val Val Phe Ala Ser Ser Val Ala Val Tyr Gly Asn Asn Gly
65          70          75          80
Glu Gly Ala Ser Ile Asp Glu Glu Thr Ile Lys Ala Pro Leu Thr Pro
          85          90          95
Tyr Ala

```

&lt;210&gt; 1259

&lt;211&gt; 417

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1259

nnacactcta gcctctgact caaggaagct gcccagggtc ttgcccttcg gtttgggggg  
 60  
 atccccgtctc ccttcgtctg gagcagacat agtgagaacg tgagaagctg caggcgtggc  
 120  
 ctcaccgtgg tgtgttccaa gatgtccagg gccaaggatg ccgtgtcctc cgggggtggcc  
 180  
 agcgtgggtg acgtggctaa gggagtggtc cagggaggcc tggacaccac tcggtctgca  
 240  
 cttacgggca ccaaggaggc ggtgtccagc ggggtcacag gggccatgga catggctaag  
 300  
 gggggccgtcc aaggggggtct ggacacctcg aaggctgtcc tcaccggcac caaggacacg  
 360  
 gtgtccactg ggctcacggg ggcagtgaat gtggccaaag ggcccgtaca ggccggc  
 417

&lt;210&gt; 1260

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1260

Leu	Lys	Glu	Ala	Ala	Gln	Gly	Leu	Ala	Leu	Arg	Phe	Gly	Gly	Ile	Pro
1				5					10					15	
Ser	Pro	Phe	Val	Trp	Ser	Arg	His	Ser	Glu	Asn	Val	Arg	Ser	Cys	Arg
			20					25				30			
Arg	Gly	Leu	Thr	Val	Val	Cys	Ser	Lys	Met	Ser	Arg	Ala	Lys	Asp	Ala
		35				40					45				
Val	Ser	Ser	Gly	Val	Ala	Ser	Val	Val	Asp	Val	Ala	Lys	Gly	Val	Val
	50					55				60					
Gln	Gly	Gly	Leu	Asp	Thr	Thr	Arg	Ser	Ala	Leu	Thr	Gly	Thr	Lys	Glu
65				70					75					80	
Ala	Val	Ser	Ser	Gly	Val	Thr	Gly	Ala	Met	Asp	Met	Ala	Lys	Gly	Ala
				85				90						95	
Val	Gln	Gly	Gly	Leu	Asp	Thr	Ser	Lys	Ala	Val	Leu	Thr	Gly	Thr	Lys
			100				105					110			
Asp	Thr	Val	Ser	Thr	Gly	Leu	Thr	Gly	Ala	Val	Asn	Val	Ala	Lys	Gly
	115					120					125				
Pro	Val	Gln	Ala	Gly											
	130														

&lt;210&gt; 1261

&lt;211&gt; 330

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1261

ngtgcacgtg ccgttcggca tcaggagatg aacatggatt tgaacgctga agtcgatcag  
 60  
 ctgggtccgcc aatcccagac ctggatcccc ttgatcatgg agtacggcag ccgcctgctg  
 120tgaccctggc ggtcggctgg tggatcgaca acaaggtcag cgcccgcctg 180  
 ggcaaaactgg taggcctgcg caacgccgac ctggcactgc aaggctttat cagcaccttg  
 240

tcgaacatcg ggctgaaagt gctgctgttc gtcagtgtgg cgtcgatgat cggcattgag  
 300  
 accacctcgt tcgtcgcgga catcggtgct  
 330

<210> 1262  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 1262  
 Xaa Ala Arg Ala Val Arg His Gln Glu Met Asn Met Asp Leu Asn Ala  
 1 5 10 15  
 Glu Val Asp Gln Leu Val Arg Gln Ser Gln Thr Trp Ile Pro Leu Ile  
 20 25 30  
 Met Glu Tyr Gly Ser Arg Leu Leu Leu Ala Leu Leu Thr Leu Ala Val  
 35 40 45  
 Gly Trp Trp Ile Asp Asn Lys Val Ser Ala Arg Leu Gly Lys Leu Val  
 50 55 60  
 Gly Leu Arg Asn Ala Asp Leu Ala Leu Gln Gly Phe Ile Ser Thr Leu  
 65 70 75 80  
 Ser Asn Ile Gly Leu Lys Val Leu Leu Phe Val Ser Val Ala Ser Met  
 85 90 95  
 Ile Gly Ile Glu Thr Thr Ser Phe Val Ala Asp Ile Gly Ala  
 100 105 110

<210> 1263  
 <211> 351  
 <212> DNA  
 <213> Homo sapiens

<400> 1263  
 acgcgtggac gatggacttc gtcggtctgc ggtacgacga agggctcaac attgccggtg  
 60  
 gcatcgatga tgagtttgct cgcctgggca acacctagca gcaatggcat cgatagtccc  
 120  
 tgcccagcct gtcctatttc gacgacgatg gtcgccgggt tcagtttctt ctcgctccac  
 180  
 gtcaacagac cgtcaccgtg gttgacgac tcgccgggtg aggcgtcctt gacgacgatc  
 240  
 tggccacgcg ccaggaata catctcccca tccacccaaa agaacgcccc caagctgggc  
 300  
 atcttggcca gcccgatgat cgagagggtt tcaacaagcg actcgggatc c  
 351

<210> 1264  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 1264  
 Met Pro Ser Leu Gly Ala Phe Phe Trp Val Asp Gly Glu Met Tyr Ser  
 1 5 10 15  
 Leu Ala Arg Gly Gln Ile Val Val Lys Asp Ala Ser Thr Gly Glu Ile

1108

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1267

```

nggacacttg tgggaaatgc cccacagcct gtgtttttat tccccttggtg aacacttggtg
60
ggaactgtcc cacggcccggt gtttctgtgc gcctgcagac actcgtggga aatgccccac
120
aacctgtggtt tttgttcccc ttgtgaacac tcgtgggaaa tgccccacaa cctgtgtttt
180
tattccccctt gtgaacactc gtgggaaatg tcccatggcc cgtgtttccg tgcacctgcg
240
gatactcatc aaacaccagg ctgtcattgg ggacaggggtg agctctggct gttggtgcag
300
catggtagga agagcaccaa gtcttggtact ctgttgattt ata
343

```

&lt;210&gt; 1268

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1268

```

Met Pro His Ser Leu Cys Phe Tyr Ser Pro Cys Glu His Leu Trp Glu
1           5           10          15
Leu Ser His Gly Pro Cys Phe Cys Ala Pro Ala Asp Thr Arg Gly Lys
20          25          30
Cys Pro Thr Thr Cys Val Phe Val Pro Leu Val Asn Thr Arg Gly Lys
35          40          45
Cys Pro Thr Thr Cys Val Phe Ile Pro Leu Val Asn Thr Arg Gly Lys
50          55          60
Cys Pro Met Ala Arg Val Ser Val His Leu Arg Ile Leu Ile Lys His
65          70          75          80
Gln Ala Val Ile Gly Asp Arg Val Ser Ser Gly Cys Trp Cys Ser Met
85          90          95
Val Gly Arg Ala Pro Ser Pro Gly Leu Cys
100          105

```

&lt;210&gt; 1269

&lt;211&gt; 391

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1269

```

tcgcgatccg gagcgatcgg tgctgcagat ggctggcgac gccctgcggg gcgcattgcg
60
ggacgccgac ctggagccgg ccgcacctaga cgggctgata gtccaggtgg ggtccccccg
120
cggcgcggac tacgacaccg tgtccgaaac ctttgggtctt tcgccacaat tctgcagcca
180
gacctggggc gcacggccgg ttcaccgcaa cggtgatcct ggcagcggcc atggcggtgt
240
ccagcggcct cgcgcggcgg gtggcttgcc tcatgggcat gaagaattcg gacctcgggc
300

```

ggttgggtga ggcggaacaat ccctttcatc atgagcaatt ccgggagaat ggcgggccgc  
 360  
 acggggaaga gggttggatc ggcattggcct c  
 391

<210> 1270  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 1270  
 Met Met Lys Gly Ile Val Arg Leu Thr Gln Pro Pro Glu Val Arg Ile  
 1 5 10 15  
 Leu His Ala His Glu Ala Ser His Pro Pro Arg Glu Ala Ala Gly His  
 20 25 30  
 Arg His Gly Arg Cys Gln Asp His Arg Cys Gly Glu Pro Ala Val Arg  
 35 40 45  
 Pro Arg Ser Gly Cys Arg Ile Val Ala Lys Asp Gln Arg Phe Arg Thr  
 50 55 60  
 Arg Cys Arg Ser Pro Arg Arg Gly Gly Thr Pro Pro Gly Arg Ser Ala  
 65 70 75 80  
 Arg Leu Gly Arg Pro Ala Pro Gly Arg Arg Pro Ala Met Arg Pro Ala  
 85 90 95  
 Gly Arg Arg Gln Pro Ser Ala Ala Pro Ile Ala Pro Asp Arg  
 100 105 110

<210> 1271  
 <211> 661  
 <212> DNA  
 <213> Homo sapiens

<400> 1271  
 acgcgtcggtt actggccacc tgcgagcgca ccagggtagg cagcactcgg tctccgtcga  
 60  
 accagaaagc gtcattcgggg tggatgaacga gaacggggcga tgttgtggtg ggacggataa  
 120  
 cccccgggtt cgtaaccata tggcccaacta aagagttcac cagggttgat ttaccagccc  
 180  
 cggtcgaccc tctaccacc gccagaagcg gcgcatcaat agtctctaag cgcggaacaa  
 240  
 tatagtcggtt aagctgggta gcatgcgctc gtgccagccc ggctgagta atagcctccg  
 300  
 gcaaatccaa ggggaactgg gctgacgca ggttgtgccc cagatcggtc aacgacagca  
 360  
 gtatctgctc agtggttcatt gtgatccttc ctggctcactc gtcaggcctg tggcgggcgcc  
 420  
 cactgcaact cggtgttgac cggctgggtg cgacgtcgct tgaggaatgc gggcagtcctc  
 480  
 ggcttcgaca atttggcacc tcggggcgacg gtgatagccg ccggggcgag cacgttcata  
 540  
 cgggttgatga gctcgatctg aagcggacca ggatcatcgt ccaaccacg cacaatggcg  
 600  
 tcacgaagat aagcaagatc tgtcccaacg cgcaggaact ctaacgtgtg ccaccaccgg  
 660

t  
661

<210> 1272  
<211> 126  
<212> PRT  
<213> Homo sapiens

<400> 1272  
Met Asn Thr Glu Gln Ile Leu Leu Ser Leu Thr Asp Leu Arg His Asn  
1 5 10 15  
Leu Arg Gln Ala Gln Phe Pro Leu Asp Leu Pro Glu Ala Ile Thr Gln  
20 25 30  
Ala Gly Leu Ala Arg Arg Ile Ala Asn Gln Leu Asn Asp Tyr Ile Leu  
35 40 45  
Pro Arg Leu Glu Thr Ile Asp Ala Pro Leu Leu Ala Val Val Gly Gly  
50 55 60  
Ser Thr Gly Ala Gly Lys Ser Thr Leu Val Asn Ser Leu Val Gly His  
65 70 75 80  
Met Val Thr Gln Pro Gly Val Ile Arg Pro Thr Thr Thr Ser Pro Val  
85 90 95  
Leu Val His His Pro Asp Asp Ala Phe Trp Phe Asp Gly Asp Arg Val  
100 105 110  
Leu Pro Thr Leu Val Arg Ser Gln Val Ala Ser Asn Asp Ala  
115 120 125

<210> 1273  
<211> 489  
<212> DNA  
<213> Homo sapiens

<400> 1273  
gccggcgaga ccggtgccgg aaagaccatg gtgggtcaccg gtattgggtt gctgctcggc  
60  
gacaaggctg acactggatt ggtccggcat ggctgcgatc gtgccgtcgt cgaagccgtt  
120  
ctcgacacgc ctgatgccgg tcgcgtcagc gagcttggcg gaacagtcga ggatggtgag  
180  
gttatctgcg ctcgacacat cacgagtcgt cgctctcgag cgctgcttgg aggagctcaa  
240  
gttaccgcta gtcagctggc ccacatcggt ggggatcagg tgaccatcca tggccaatct  
300  
gaacaagtga ggttggtcga cgcagcgcgg cagctcgacg tcgttgaccg ggctgccgga  
360  
gatgagctgg caggctacct aagtcgacat gcacagctgt ggtcggagtt tcgtgctgca  
420  
tcccagcgtc ttcagcgcct caacgaggat cgcgctgggg ccgagatgga acgcgaggtg  
480  
cttacgcgt  
489

<210> 1274  
<211> 163  
<212> PRT

<213> Homo sapiens

<400> 1274

Ala	Gly	Glu	Thr	Gly	Ala	Gly	Lys	Thr	Met	Val	Val	Thr	Gly	Ile	Gly
1				5					10					15	
Leu	Leu	Leu	Gly	Asp	Lys	Ala	Asp	Thr	Gly	Leu	Val	Arg	His	Gly	Cys
			20					25					30		
Asp	Arg	Ala	Val	Val	Glu	Ala	Val	Leu	Asp	Thr	Pro	Asp	Ala	Gly	Arg
		35					40					45			
Val	Ser	Glu	Leu	Gly	Gly	Thr	Val	Glu	Asp	Gly	Glu	Val	Ile	Cys	Ala
	50					55					60				
Arg	His	Ile	Thr	Ser	Arg	Arg	Ser	Arg	Ala	Leu	Leu	Gly	Gly	Ala	Gln
65					70				75					80	
Val	Thr	Ala	Ser	Gln	Leu	Ala	His	Ile	Val	Gly	Asp	Gln	Val	Thr	Ile
				85				90						95	
His	Gly	Gln	Ser	Glu	Gln	Val	Arg	Leu	Val	Asp	Ala	Ala	Arg	Gln	Leu
			100					105					110		
Asp	Val	Val	Asp	Arg	Ala	Ala	Gly	Asp	Glu	Leu	Ala	Gly	Tyr	Leu	Ser
		115					120					125			
Arg	His	Ala	Gln	Leu	Trp	Ser	Glu	Phe	Arg	Ala	Ala	Ser	Gln	Arg	Leu
	130					135					140				
Gln	Arg	Leu	Asn	Glu	Asp	Arg	Ala	Gly	Ala	Glu	Met	Glu	Arg	Glu	Val
145					150					155					160
Leu	Thr	Arg													

<210> 1275

<211> 384

<212> DNA

<213> Homo sapiens

<400> 1275

```

nngctagcaa gtgcaagtac gagcaaaagt tatcagcaac agcgggaggc tgaacttctc
60
gtcgcacggc tagaggggga aatgcacgca cacagcgacc cgaccccgtc gccacaacca
120
cccgaggatg cagggttgat tgatgttgcc ctgaaagagg cgaagaaagc ctttcatgaa
180
ggcaaggctc atctaattga taaactcaat caggagatac ttcgcctggc aaacgaattc
240
ggtgcgctcg ggcttgaatc tattgagctt ggctccgacg cgaagatggc agtacgcaaa
300
ggcaatcaga aatcagcggt cagcaggctg actcccgggt aacgtctcag gctgcgcatc
360
gctacagcca tcgcgttggt acgc
384

```

<210> 1276

<211> 128

<212> PRT

<213> Homo sapiens

<400> 1276

Xaa Leu Ala Ser Ala Ser Thr Ser Lys Ser Tyr Gln Gln Gln Arg Glu



```

      1             5             10             15
Ala Glu Leu Leu Val Ala Arg Leu Glu Gly Glu Met His Ala His Ser
      20             25             30
Asp Pro Thr Pro Ser Pro Gln Pro Pro Glu Asp Ala Gly Leu Ile Asp
      35             40             45
Val Ala Leu Lys Glu Ala Lys Lys Ala Phe Asp Glu Gly Lys Val Asp
      50             55             60
Leu Met Asp Lys Leu Asn Gln Glu Ile Leu Arg Leu Ala Asn Glu Phe
      65             70             75             80
Gly Ala Leu Gly Leu Glu Ser Ile Glu Leu Gly Ser Asp Ala Lys Met
      85             90             95
Ala Val Arg Lys Gly Asn Gln Lys Ser Ala Phe Ser Arg Leu Thr Pro
      100            105            110
Gly Glu Arg Leu Arg Leu Arg Ile Ala Thr Ala Ile Ala Leu Leu Arg
      115            120            125

```

&lt;210&gt; 1277

&lt;211&gt; 392

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1277

```

cagtttcagc cccgctgtgt gtccccaatt cctgtctctc ctaccagccg gattcagaac
60
ccagtggcctt tcctcagctc tgttctgcct tctctccctg ccatcccacc cacaaatgcc
120
atggggctgc ctagaagtgc accatccatg ccatcccagg gattagcgaa gaaaaatata
180
aagtctcctc aaccagtga tgaatgataac attcgtgaaa ctaagaacgc agtgattcga
240
gacttgggga aaaaaataac tttcagtgat gtcagaccaa accagcagga gtacaaaatt
300
tcaagctttg agcagaggct gatgaatgaa atagagtttc gcttggaacg tactcctgtt
360
gatgaatcac atgatgaaat tcaacatgat gg
392

```

&lt;210&gt; 1278

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1278

```

Gln Phe Gln Pro Arg Cys Val Ser Pro Ile Pro Val Ser Pro Thr Ser
      1             5             10             15
Arg Ile Gln Asn Pro Val Ala Phe Leu Ser Ser Val Leu Pro Ser Leu
      20             25             30
Pro Ala Ile Pro Pro Thr Asn Ala Met Gly Leu Pro Arg Ser Ala Pro
      35             40             45
Ser Met Pro Ser Gln Gly Leu Ala Lys Lys Asn Thr Lys Ser Pro Gln
      50             55             60
Pro Val Asn Asp Asp Asn Ile Arg Glu Thr Lys Asn Ala Val Ile Arg
      65             70             75             80
Asp Leu Gly Lys Lys Ile Thr Phe Ser Asp Val Arg Pro Asn Gln Gln

```

[illegible]

```
<210> 1279
<211> 297
<212> DNA
<213> Homo sapiens
```

```
<400> 1279
atggagtcgc agactctccg ccacatgac gaggacgact gcgccgacaa cggcatccca
60
ctccccaacg tcaactccag gatcctctct aaggtcacgc agtactgcaa cagtcacgtc
120
cacgccgcgc ccaaaccgcg tgactccgct gcctccgagg gcggcgagga cctcaagagc
180
tgggacgcga agttcgtcaa ggtggaccag gctacgctct tcgacctcat cctggctgcc
240
aactatctga acatcaaggg attgctggac ctgacctgcc agacgggtgc tgacatg
297
```

```
<210> 1280
<211> 99
<212> PRT
<213> Homo sapiens
```

```

<400> 1280
Met Glu Ser Gln Thr Leu Arg His Met Ile Glu Asp Asp Cys Ala Asp
 1                5                10                15
Asn Gly Ile Pro Leu Pro Asn Val Asn Ser Arg Ile Leu Ser Lys Val
      20                25                30
Ile Glu Tyr Cys Asn Ser His Val His Ala Ala Ala Lys Pro Ala Asp
      35                40                45
Ser Ala Ala Ser Glu Gly Gly Glu Asp Leu Lys Ser Trp Asp Ala Lys
      50                55                60
Phe Val Lys Val Asp Gln Ala Thr Leu Phe Asp Leu Ile Leu Ala Ala
65                70                75                80
Asn Tyr Leu Asn Ile Lys Gly Leu Leu Asp Leu Thr Cys Gln Thr Gly
      85                90                95
Ala Asp Met

```

```
<210> 1281
<211> 515
<212> DNA
<213> Homo sapiens
```

```
<400> 1281
acgcgtgaag ggggctttgg aggggatggc ttctggactg cacgatgggt gaacacagtt
60
```

ttttaaactc ttttccacat ctgtataggt ttgaaaatta tcaacaactc atggggagggg  
 120  
 tggcgtgccca ggtcatggct gcctggagcc cttctgagga gggccggctc aaccgaggac  
 180  
 gccctcccca ctaccaagta ggcactgcgg gcaggagtcg ccacccccac cccaaggaag  
 240  
 ttcagaacag gcaacaggag gagcctgact ccaacagagt tgggtgtcatc cggcgcacatc  
 300  
 ctaaggacgt cacaacacat caactctggg agcccaaggg ggtgtgtggg ccactcaagg  
 360  
 ggaagatgat ccagaagctc tgctccctcc ctttgctttt gaagaacaca ggagtgcacac  
 420  
 gtgggggaatc taccggctta atttcttctt agtaacaggc atagtaggat caaaaaattt  
 480  
 ttgcttctaa tttttaaaaa cattcaatgt gtaca  
 515

<210> 1282  
 <211> 135  
 <212> PRT  
 <213> Homo sapiens

<400> 1282  
 Met Gly Glu His Ser Phe Leu Asn Ser Phe Pro His Leu Tyr Arg Phe  
 1 5 10 15  
 Glu Asn Tyr Gln Gln Leu Met Gly Arg Val Ala Cys Gln Val Met Ala  
 20 25 30  
 Ala Trp Ser Pro Ser Glu Glu Gly Arg Leu Asn Arg Gly Arg Pro Pro  
 35 40 45  
 His Tyr Gln Val Gly Thr Ala Gly Arg Ser Arg His Pro His Pro Lys  
 50 55 60  
 Glu Val Gln Asn Arg Gln Gln Glu Glu Pro Asp Ser Asn Arg Val Gly  
 65 70 75 80  
 Val Ile Arg Arg Ile Ala Lys Asp Val Thr Thr His Gln Leu Trp Glu  
 85 90 95  
 Pro Lys Gly Val Cys Gly Pro Leu Lys Gly Lys Met Ile Gln Lys Leu  
 100 105 110  
 Cys Ser Leu Pro Leu Leu Leu Lys Asn Thr Gly Val Thr Arg Gly Glu  
 115 120 125  
 Ser Thr Gly Leu Ile Ser Ser  
 130 135

<210> 1283  
 <211> 296  
 <212> DNA  
 <213> Homo sapiens

<400> 1283  
 gaattctca caatgaactg cagtgtctgg aggaccagtt gggtagcctt actccgggtc  
 60  
 tccactgcag aacttataca tatatgcttt gtgcacacaa agaaaaacag cagcccaaaa  
 120  
 gaatcccggc tggggctctt aggagggagg aaagttccca caggtaactc actggttaat  
 180

tttaaagagc tcaggaaagg aaggaaggat ggctttttct cttgtgagtc aagacaaggt  
 240  
 cctgatgata accctcccag atcagaacgt aactttcaac ccacgagtgc tgctcn  
 296

<210> 1284  
 <211> 94  
 <212> PRT  
 <213> Homo sapiens

<400> 1284  
 Met Asn Cys Ser Val Trp Arg Thr Ser Trp Val Ala Leu Leu Arg Val  
 1 5 10 15  
 Ser Thr Ala Glu Leu Ile His Ile Cys Phe Val His Thr Lys Lys Asn  
 20 25 30  
 Ser Ser Pro Lys Glu Ser Arg Leu Gly Leu Leu Gly Gly Arg Lys Val  
 35 40 45  
 Pro Thr Gly Asn Ser Leu Val Asn Phe Lys Glu Leu Arg Lys Gly Arg  
 50 55 60  
 Lys Asp Gly Phe Phe Ser Cys Glu Ser Arg Gln Gly Pro Asp Asp Asn  
 65 70 75 80  
 Pro Pro Arg Ser Glu Arg Asn Phe Gln Pro Thr Ser Ala Ala  
 85 90

<210> 1285  
 <211> 526  
 <212> DNA  
 <213> Homo sapiens

<400> 1285  
 gggccccttc ttacctgccc cttccccgtg ccaccaaccc gtagacaggg agggcaagca  
 60  
 gtgaaaggtc catctagagg aggtaaaaga cagggctgag ggaaaacgcc ttgtacagtc  
 120  
 aggatggcag atgtactctg tcagggaaga cagccccaca gaaaaggctc ggcttggcca  
 180  
 agaagcaaca aaagggattc tacacctcag accagggagg gggaatgtgt acaaagattg  
 240  
 gatttactaa attcagagcc acagactttc aggtacttcg gtgaagatca gtgctctttc  
 300  
 aaacccacac ttcagaggca ggctttaaaa cgcctgactt ctgtcagggc cacaggctgg  
 360  
 gctgccc aaa gctcctacgg ggctggggga tccgagagag gacttcccac tagtccaaga  
 420  
 tgtggtgact agtttcaagc cagagattga ggagcagacc tgatgccctt tcgggcccct  
 480  
 gctaagaacc tgattcgagg aaaaggaagt gaagacagta acgcgt  
 526

<210> 1286  
 <211> 102  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 1286

```

Met Ala Asp Val Leu Cys Gln Gly Arg Gln Pro His Arg Lys Gly Ser
 1           5           10           15
Ala Trp Pro Arg Ser Asn Lys Arg Asp Ser Thr Pro Gln Thr Arg Glu
          20           25           30
Gly Glu Cys Val Gln Arg Leu Asp Leu Leu Asn Ser Glu Pro Gln Thr
          35           40           45
Phe Arg Tyr Phe Gly Glu Asp Gln Cys Ser Phe Lys Pro Thr Leu Gln
          50           55           60
Arg Gln Ala Leu Lys Arg Leu Thr Ser Val Arg Ala Thr Gly Trp Ala
65           70           75           80
Ala Gln Ser Ser Tyr Gly Ala Gly Gly Ser Glu Arg Gly Leu Pro Thr
          85           90           95
Ser Pro Arg Cys Gly Asp
          100

```

&lt;210&gt; 1287

&lt;211&gt; 333

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1287

```

acgcgtgaag gggagaggca gctccaggtg gaggggaagtg catgaggaag cagagaggca
60
ggcgacaggc agcgtggctg gggctgggca ggccttccag tttgattgca gccagagggt
120
caggtgagaa gaaggtacaa caagcaagga aggccccagg aagccactgg ggggtgttga
180
gccattgaat attctggatt ttaggacatt tctgtggctg actccactgc catcagagtt
240
catccacccc aactccagcc tgagagtgtc ggggcactgg gcactccgga attcttcaaa
300
gctctgatgc aacatgtccc cagggtgtct gac
333

```

&lt;210&gt; 1288

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1288

```

Met Leu His Gln Ser Phe Glu Glu Phe Arg Ser Ala Gln Cys Pro Ser
 1           5           10           15
Thr Leu Arg Leu Glu Leu Gly Trp Met Asn Ser Asp Gly Ser Gly Val
          20           25           30
Ser His Arg Asn Val Leu Lys Ser Arg Ile Phe Asn Gly Ser Asn Thr
          35           40           45
Pro Ser Gly Phe Leu Gly Pro Ser Leu Leu Val Val Pro Ser Ser His
          50           55           60
Leu Thr Ser Gly Leu Gln Ser Asn Trp Lys Ala Cys Pro Ala Pro Ala
65           70           75           80
Thr Leu Pro Val Ala Cys Leu Ser Ala Ser Ser Cys Thr Ser Leu His
          85           90           95
Leu Glu Leu Pro Leu Pro Phe Thr Arg

```

100

105

<210> 1289  
 <211> 336  
 <212> DNA  
 <213> Homo sapiens

<400> 1289  
 acgcgtgtct gtgtacaggt ggaaggggat gggatatgaga tgggtgcagcg tgtgcatggg  
 60  
 cacggcgat ggtgtgtgag tgcactcgtg tgccggagag ctgtaagctg ctggctgagt  
 120  
 cctgcacggt ggaggaggca aggtggcccc tgcctgtggg cacagagccc accttcggt  
 180  
 ccagccccgag gcccctttcc cagagcccc tcccaagggg ccataccacc tgcattcccca  
 240  
 agatggcgtg gggcgctcct ggtgcaggag caggggacag tcagggaggc gtgtggcgga  
 300  
 cagtagcagc cccccagccc cctcccccc accggt  
 336

<210> 1290  
 <211> 89  
 <212> PRT  
 <213> Homo sapiens

<400> 1290  
 Met Val Cys Glu Cys Thr Arg Val Pro Glu Ser Cys Lys Leu Leu Ala  
 1 5 10 15  
 Glu Ser Cys Thr Val Glu Glu Ala Arg Trp Pro Leu Pro Val Gly Thr  
 20 25 30  
 Glu Pro Thr Phe Arg Ser Ser Pro Arg Pro Leu Ser Gln Ser Pro Leu  
 35 40 45  
 Pro Arg Gly His Thr Thr Cys Ile Pro Lys Met Ala Trp Gly Val Pro  
 50 55 60  
 Gly Ala Gly Ala Gly Asp Ser Gln Gly Gly Val Trp Arg Thr Val Ala  
 65 70 75 80  
 Ala Pro Gln Pro Pro Ser Pro His Arg  
 85

<210> 1291  
 <211> 379  
 <212> DNA  
 <213> Homo sapiens

<400> 1291  
 tggccatcca cctctgtcag ctgttccggc aaccattca gatcattgtg gtagtaacga  
 60  
 atcttctgca acggcccggc accgtccacg cgagccagag gttgatagcc ttcattcctca  
 120  
 taaacgtaca ggcttgtctg gctgtgttta tgctcctgca ataaccgcaa accatcccag  
 180  
 gtaaaccggg tttcccccaa cggataccca tcaactgccat gctcggtttt ttctatccga  
 240

cgccccagcg ggtcatacac catcctgacc acgctacat cgtcattacg cacttcaacc  
 300  
 agccggcttt cagcgtcata cgcaaaccgc tgcacgccac gcttggcact gcgcttctcg  
 360  
 accatccgcc caaacgcgt  
 379

<210> 1292  
 <211> 121  
 <212> PRT  
 <213> Homo sapiens

<400> 1292  
 Met Val Glu Lys Arg Ser Ala Lys Arg Gly Val Gln Arg Phe Ala Tyr  
 1 5 10 15  
 Asp Ala Glu Ser Arg Leu Val Glu Val Arg Asn Asp Asp Gly Ser Val  
 20 25 30  
 Val Arg Met Val Tyr Asp Pro Leu Gly Arg Arg Ile Glu Lys Thr Glu  
 35 40 45  
 His Gly Ser Asp Gly Tyr Pro Leu Gly Glu Thr Arg Phe Thr Trp Asp  
 50 55 60  
 Gly Leu Arg Leu Leu Gln Glu His Lys His Ser Gln Thr Ser Leu Tyr  
 65 70 75 80  
 Val Tyr Glu Asp Glu Gly Tyr Gln Pro Leu Ala Arg Val Asp Gly Ala  
 85 90 95  
 Gly Pro Leu Gln Lys Ile Arg Tyr Tyr His Asn Asp Leu Asn Gly Leu  
 100 105 110  
 Pro Glu Gln Leu Thr Glu Val Asp Gly  
 115 120

<210> 1293  
 <211> 340  
 <212> DNA  
 <213> Homo sapiens

<400> 1293  
 nngccggccg cccgagagct gttegaggcg tgccgcaacg gggacgtgga acgagtcaag  
 60  
 aggctggtga cgcttgagaa ggtgaacagc cgcgacacgg cgggcaggaa atccaccccg  
 120  
 ctgcacttcg ccgcaggttt tgggcggaaa gacgtagtgt aatatttgct tcagaatggt  
 180  
 gcaaagtgtc aagcacgtga tgatgggggc cttattcctc ttcataatgc atgctctttt  
 240  
 ggtcatgctg aagtagtcaa tctccttttg cgacatggtg cagaccccaa tgcttgagat  
 300  
 aattggaatt atactcctag aggggtggagt gtgctcgcga  
 340

<210> 1294  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 1294

Xaa Pro Ala Ala Arg Glu Leu Phe Glu Ala Cys Arg Asn Gly Asp Val  
 1 5 10 15  
 Glu Arg Val Lys Arg Leu Val Thr Pro Glu Lys Val Asn Ser Arg Asp  
 20 25 30  
 Thr Ala Gly Arg Lys Ser Thr Pro Leu His Phe Ala Ala Gly Phe Gly  
 35 40 45  
 Arg Lys Asp Val Val Glu Tyr Leu Leu Gln Asn Gly Ala Asn Val Gln  
 50 55 60  
 Ala Arg Asp Asp Gly Gly Leu Ile Pro Leu His Asn Ala Cys Ser Phe  
 65 70 75 80  
 Gly His Ala Glu Val Val Asn Leu Leu Leu Arg His Gly Ala Asp Pro  
 85 90 95  
 Asn Ala

&lt;210&gt; 1295

&lt;211&gt; 351

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1295

ggatcccgga gacctcgctcg gcgaacgtca cctcgctccag ggccgaggcg cggaacaccg  
 60  
 acgtgtcgat gccctcgccc tcgatgcagt cggtcagcgg tacgacggcg ccgcgggagg  
 120  
 cgaaggtgcc gatctggctg cgctcggcgt agaccagcga cggcggttcg cccgacgcca  
 180  
 cggaggagag gaactgctgg atgtcgaggt caccctcgat cagcttgacc ttggcgctcg  
 240  
 cgagctcttc cttcgcccgg tcgagccgca ccgtcgcgat ctcgtcgccg gcaccgaagc  
 300  
 ccatacctc gacctcgccg gagagcttcg ccccgctgtc gaaagacgcg t  
 351

&lt;210&gt; 1296

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1296

Gly Ser Arg Arg Pro Arg Arg Arg Thr Ser Pro Arg Pro Gly Pro Arg  
 1 5 10 15  
 Arg Gly Thr Pro Thr Cys Arg Cys Pro Arg Pro Arg Cys Ser Arg Ser  
 20 25 30  
 Ala Val Arg Arg Arg Arg Gly Arg Arg Arg Cys Arg Ser Gly Cys Ala  
 35 40 45  
 Arg Arg Arg Pro Ala Thr Ala Val Arg Pro Thr Pro Arg Arg Arg Gly  
 50 55 60  
 Thr Ala Gly Cys Arg Gly His Pro Arg Ser Ala  
 65 70 75

&lt;210&gt; 1297

&lt;211&gt; 356



<212> DNA

<213> Homo sapiens

<400> 1297

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gtgcacccgg attcccattg ccaccgactt cgagtaaact ccagtcccga ggacacgaga
60
gacacccagg cctcaggccc catgggcacg ctccacgcca cggctcctac cagagggaca
120
gatacactct acaaatctcg gggcccacca caccaagaag acacggagga gccaacaaaa
180
gaaggaccat acgaaatgca cccccaaagc aaccaaccaa tccaagaaaa aatacgtctc
240
agggtttctgt gggccctctt gcatgggctg ccttgccccc ctgttctggc ctggctcaag
300
caccttacct cagcctgctc gaaagagccc tggctaccag agcagagcac tggcct
356

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<210> 1298

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1298

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Met Gly Thr Leu His Ala Thr Ala Pro Thr Arg Gly Thr Asp Thr Leu
 1             5             10             15
Tyr Lys Ser Arg Gly Pro Pro His Gln Glu Asp Thr Glu Glu Pro Thr
      20             25             30
Lys Glu Gly Pro Tyr Glu Met His Pro Gln Ser Asn Gln Pro Ile Gln
      35             40             45
Glu Lys Ile Arg Leu Arg Val Leu Trp Ala Leu Leu His Gly Leu Pro
      50             55             60
Cys Pro Pro Val Leu Ala Trp Leu Lys His Leu Thr Pro Ala Cys Ser
65             70             75             80
Lys Glu Pro Trp Leu Pro Glu Gln Ser Thr Gly
      85             90

```

<210> 1299

<211> 307

<212> DNA

<213> Homo sapiens

<400> 1299

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gttggtggca ggatgtctca gttccttgcc atgtgggtct ctacacaggg cagcttcctg
120
tgtctttgcc atatggcaac tgagaatgat cttggctacc ttctccagcc cgggagtcgg
180
gagttttctg ggggtggggtc acgggtcttg cccggagtto gccctggcaa aggcctgtgc
240
cagtgatcct ggagcggagc gaagtgtttc cgtgactctg cagccgcagt tcttagggct
300
tccttag
307

```

<210> 1300  
 <211> 90  
 <212> PRT  
 <213> Homo sapiens

<400> 1300  
 Met Ala Ala Gly Leu Arg Leu Trp Trp Leu Leu Ala Gly Cys Leu Ser  
 1 5 10 15  
 Ser Leu Pro Cys Gly Ser Leu His Arg Ala Ala Ser Cys Val Phe Ala  
 20 25 30  
 Ile Trp Gln Leu Arg Met Ile Leu Ala Thr Phe Ser Ser Pro Gly Val  
 35 40 45  
 Gly Ser Phe Leu Gly Trp Gly His Gly Ser Cys Pro Glu Phe Ala Leu  
 50 55 60  
 Ala Lys Ala Cys Ala Ser Asp Pro Gly Ala Glu Arg Ser Val Ser Val  
 65 70 75 80  
 Thr Leu Gln Pro Gln Phe Leu Gly Leu Pro  
 85 90

<210> 1301  
 <211> 408  
 <212> DNA  
 <213> Homo sapiens

<400> 1301  
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 120  
 cgccctatgg tgtcagatac gattacactt ttgcatgacc ttagaagggtc tggcgcaaac  
 180  
 atcatgtttg aaggcgcgca agggctcttg ttggatgttg atcatggtac ttaccggtat  
 240  
 gtgacttcat ctaatacgac tgcgggcgga gcgccagcgg gaacagggtt tggtcctttg  
 300  
 tacttagatt atgtattagg tatcactaag gcttatacga ctgcggttg tcttggaact  
 360  
 ttccctactg agttgtttga cgaagatggt gagcgtcttg gtacgcgt  
 408

<210> 1302  
 <211> 136  
 <212> PRT  
 <213> Homo sapiens

<400> 1302  
 Leu Ser Lys Leu Lys Glu Val Leu Glu Phe Tyr Asn Phe Ile Leu Thr  
 1 5 10 15  
 Asn Tyr Tyr Lys Val Glu Pro Ile Ser Phe Asp Ala Val Tyr Ala Glu  
 20 25 30  
 Gly Leu Glu Met Ala Glu Phe Leu Arg Pro Met Val Ser Asp Thr Ile  
 35 40 45  
 Thr Leu Leu His Asp Leu Arg Arg Ser Gly Ala Asn Ile Met Phe Glu

50	55	60
Gly Ala Gln Gly Ser Leu Leu Asp Val Asp His Gly Thr Tyr Pro Tyr		
65	70	75
Val Thr Ser Ser Asn Thr Thr Ala Gly Gly Ala Pro Ala Gly Thr Gly		80
	85	90
Phe Gly Pro Leu Tyr Leu Asp Tyr Val Leu Gly Ile Thr Lys Ala Tyr		95
	100	105
Thr Thr Arg Val Gly Ser Gly Pro Phe Pro Thr Glu Leu Phe Asp Glu		110
	115	120
Asp Gly Glu Arg Leu Gly Thr Arg		125
130	135	

&lt;210&gt; 1303

&lt;211&gt; 1037

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1303

```

gccggggggg ggatgctatc taacatcttc atgttcaacc cagagaagaa acatcccgcc
60
gtttgccctg gggccctctc atcccacatc attttttcaa cccttcccca ncctttcnga
120
aataggggcca accccttaaa aancaaatnt tcanataaac ctttttccct ccaccctttt
180
cccatcccat cttttttccc tcacaaacac aaacaaaang cctctttcct ttgccatttc
240
cactcctttt ggaagaaaca ggccctgttc cctccctgct caccacttca ccagctcag
300
ctggcacaaa aatactgcca ccacaccttc accctgcta gcccaacctg gcagggcctc
360
ggagtagcct gccagctaaa atacgggttg ccagataac tgtgaatgtc agataagaat
420
cttctgggac aagtatgtcc catgccatat ttgggacata cttacactaa taaatttctg
480
tttatctgaa actcaaattt gcttgggcgt cctgtacttt tottaactaa atttggtgcc
540
tctacacaca aggtccctgg ggtggggggg cacaggagca agccccttcc caggctgggt
600
ccctgcgggc atctcccaca ggccaggact ggccaccag atggagcccg tgccaggcag
660
ccggcgacag acggacaaag gctgctcagg agacactgca caccttctc tttcttgtct
720
gggggctcaa gaatccagac gccacctcc ccgagcgagc accaagacag gaagccaacc
780
tgcaatgcc agccactgc gaccacaggg ctctgcggg gtcttgcgg aaccagggt
840
tccggtccag aagccaggga taaatgccgc ttctctata gggacggtca gagtagagag
900
ggggaggcct acagtctcac ctgcaggag aggaagtcct cggggcgggc acgtgggggg
960
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1020
tggaatccac gcgtggc
1037

```

<210> 1304  
 <211> 132  
 <212> PRT  
 <213> Homo sapiens

<400> 1304  
 Met Glu Pro Val Pro Gly Ser Arg Arg Gln Thr Asp Lys Gly Cys Ser  
 1 5 10 15  
 Gly Asp Thr Ala His Leu Pro Leu Ser Cys Leu Gly Ala Gln Glu Ser  
 20 25 30  
 Arg Arg Pro Pro Pro Arg Ala Ser Thr Lys Thr Gly Ser Gln Pro Ala  
 35 40 45  
 Met Pro Ser Pro Leu Arg Pro Gln Gly Ser Ala Gly Val Leu Pro Glu  
 50 55 60  
 Pro Arg Val Pro Val Gln Lys Pro Gly Ile Asn Ala Ala Ser Pro Ile  
 65 70 75 80  
 Gly Thr Val Arg Val Glu Arg Gly Arg Pro Thr Val Ser Pro Ala Gly  
 85 90 95  
 Arg Gly Ser Pro Arg Gly Gly His Val Gly Gly Leu Thr Ala Pro Ser  
 100 105 110  
 Thr Pro Gly His Ser Asp His Gly Leu His Thr Gln Lys Gln Ser Gly  
 115 120 125  
 Ser His Ala Trp  
 130

<210> 1305  
 <211> 775  
 <212> DNA  
 <213> Homo sapiens

<400> 1305  
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 ccggccccgc tgcgggtgga gagacgtcgg gccctctacg ggtcctggta cgagtttttc  
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 ccgcgctctc aggggtgctta tgtcgatgcg gacggtcact gggtttcagg tactttcgac  
 180  
 acctcctggg agcgccctgga cgccgcccgt gcgatgggat ttgacgttgt ttacctgccc  
 240  
 gcgatccatc ccatgggcca agccttcgc aagggaagg acaacacctt gaccccaggt  
 300  
 ccggacgata ccggatcgcc gtgggccatc ggatcgtctg atggcggcca tgacaccatt  
 360  
 cccccgacc taggcacctt cgacgacctc gaccgtttcg tggcccacgc tcatgacctt  
 420  
 ggcattggagg tggccctaga ttttgcttg caagcctcac cagaccaccc gtgggtacac  
 480  
 cagcaccggg agtgggtcac gacccgcgtt gatggcacca tcgcctatgc agaaaattca  
 540  
 cccaaaaagt atcaggacat ctacccgatc aacttcgaca atgaccctga cggtatctac  
 600  
 caggaatgct tgcggctgct ggagttatgg atctcccacg gcgtgacgat tttccgcgtc  
 660

gataatccac ataccaagcc tctgaatttc tgggcctggc tcatggaaca ggttcacgt  
 720  
 cgtcaccccg aggtcatctt cctggcagag gccttcaccc gtcccagat gatca  
 775

<210> 1306  
 <211> 258  
 <212> PRT  
 <213> Homo sapiens

<400> 1306  
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 1 5 10 15  
 Ser Pro Thr Leu Pro Ala Pro Leu Arg Val Glu Arg Arg Arg Ala Leu  
 20 25 30  
 Tyr Gly Ser Trp Tyr Glu Phe Phe Pro Arg Ser Gln Gly Ala Tyr Val  
 35 40 45  
 Asp Ala Asp Gly His Trp Val Ser Gly Thr Phe Asp Thr Ser Trp Glu  
 50 55 60  
 Arg Leu Asp Ala Ala Ala Ala Met Gly Phe Asp Val Val Tyr Leu Pro  
 65 70 75 80  
 Ala Ile His Pro Met Gly Gln Ala Phe Arg Lys Gly Lys Asp Asn Thr  
 85 90 95  
 Leu Thr Pro Gly Pro Asp Asp Pro Gly Ser Pro Trp Ala Ile Gly Ser  
 100 105 110  
 Ser Asp Gly Gly His Asp Thr Ile His Pro Asp Leu Gly Thr Phe Asp  
 115 120 125  
 Asp Leu Asp Arg Phe Val Ala His Ala His Asp Leu Gly Met Glu Val  
 130 135 140  
 Ala Leu Asp Phe Ala Leu Gln Ala Ser Pro Asp His Pro Trp Val His  
 145 150 155 160  
 Gln His Pro Glu Trp Phe Thr Thr Arg Val Asp Gly Thr Ile Ala Tyr  
 165 170 175  
 Ala Glu Asn Ser Pro Lys Lys Tyr Gln Asp Ile Tyr Pro Ile Asn Phe  
 180 185 190  
 Asp Asn Asp Pro Asp Gly Ile Tyr Gln Glu Cys Leu Arg Leu Leu Glu  
 195 200 205  
 Leu Trp Ile Ser His Gly Val Thr Ile Phe Arg Val Asp Asn Pro His  
 210 215 220  
 Thr Lys Pro Leu Asn Phe Trp Ala Trp Leu Met Glu Gln Val His Arg  
 225 230 235 240  
 Arg His Pro Glu Val Ile Phe Leu Ala Glu Ala Phe Thr Arg Pro Glu  
 245 250 255  
 Met Ile

<210> 1307  
 <211> 624  
 <212> DNA  
 <213> Homo sapiens

<400> 1307  
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atgctgggca catgcggtca gggccctgtg cctgagccgt ggaactccac agccattcca  
 120  
 catgttcagt cccacaccct gaggccaagg cccccgagt ccctgaggga gcaaggccct  
 180  
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 240  
 ctgtggctgc atggggcaaa cacagcctgg cctgaggctg ccggccagtc ggggtggcca  
 300  
 taggctaacg agaagccagg gcctccctcc ccactgggct ttccacaaaa acctgactaa  
 360  
 tgtccaggga cagccaaagg ccttgaggct agctgggtgg aacacctttc ccctaccatc  
 420  
 ccgagatatt gtcttcttgg atggagtttt caaagccctc catgtggagg tctcgggatg  
 480  
 agaggcctcg gctgagctct gtgcagagga gcaggaagct gcagaatggg caccgcctc  
 540  
 cctcccagca cctccagtcg ctgccacgcc ccaagctcct gagctgctct gcccaagacc  
 600  
 tcccccaacc ttggtctgac gcgt  
 624

<210> 1308

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1308

Met	Ala	Thr	Pro	Thr	Gly	Arg	Gln	Pro	Gln	Ala	Arg	Leu	Cys	Leu	Pro
1				5				10					15		
His	Ala	Ala	Thr	Ala	Trp	Gly	Cys	Arg	Ala	Leu	Leu	Gly	Ala	Val	Cys
			20				25					30			
Leu	Cys	Ser	Gly	Ser	Leu	Gly	Trp	Gln	Gly	Leu	Ala	Pro	Ser	Gly	Thr
		35				40					45				
Arg	Gly	Ala	Leu	Ala	Ser	Gly	Cys	Gly	Thr	Glu	His	Val	Glu	Trp	Leu
	50					55				60					
Trp	Ser	Ser	Thr	Ala	Gln	Ala	Gln	Gly	Pro	Asp	Arg	Met	Cys	Pro	Ala
65					70				75				80		
Ser	Leu	Thr	Ser	Pro	Glu	Val	Gly	Cys	Arg	Glu	Pro	Gly	Ala	Trp	His
				85				90					95		
Ser	Pro	Pro	Ala												
			100												

<210> 1309

<211> 563

<212> DNA

<213> Homo sapiens

<400> 1309

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 taccgtactg tgtgtatcgg caaaaagagc ctgaaatggg tgccgctgtt cggtcagttg  
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 ttctggctgg cgggcaatgt gttgattgac cggggcaacg cgcacaaggc gcgccgctca  
 180

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atgtctcacca ccaccacac cttgcagcat aaagacacat cgatctgggt atttgccgaa
240
ggtacacgca atttcggtga aaccttgctg ccgttcaaga aagggtgcgtt ccagatggcg
300
attgccgcag gtgtgccgat cgtgcaggctg tgtgtcagca cgtatgtgaa gcacatgaag
360
ctcaatcggt gggacagtgg cgatatttta attcgctcgt tgccgccaat tcttacgacc
420
ggactgacgt tggatgacat gccacggttg atggagacct gccgtcaaca aatgcgcgag
480
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563

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<210> 1310

<211> 183

<212> PRT

<213> Homo sapiens

<400> 1310

[illegible]

<210> 1311

<211> 674

<212> DNA

<213> Homo sapiens

<400> 1311

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tccagggccg acccggcaca caccgtcggg ctgacggatg atctgagctg ggtcaagcgc  
 120  
 atctcccggc cgccgaaagc cggaatacca cgaggcgctg gatcggcgat tctgttcaca  
 180  
 gggctgaccc cegatcagga tcgactgacc aacgagtggg cgcaggcgca cgggttgggg  
 240  
 gaattttatg tcatggcccc ccgaatcctc ggtgatgtcc cgctgccaac gatcaccatc  
 300  
 gtcgcgaccg tcaccttcat cgtgttgctg gccatcatgg cgggcctggt ggccaaggag  
 360  
 gagagagccg ccaacagtga tctggtgacc agcctcaaac gcatcggatt gggcaggcgt  
 420  
 tgggtggacc aggtcatcct tgtggaggtg gctaccacaa tgctggccgc cctgatatgc  
 480  
 ggggtgatct cctcggttgt cgcgggtgtg ctcacaggca ggatcctgtc gggagccttg  
 540  
 gacctgcttg gggccgcgtg gtgggtcttc ggtgcgttgg ccgccgggat gttcggtgga  
 600  
 tcttctgtgg gggccgccat ccacgcgcgt taccacttcg acatgagagc tacctgatcc  
 660  
 acgaccccggt gaca  
 674

<210> 1312

<211> 196

<212> PRT

<213> Homo sapiens

<400> 1312

Met	Asp	Gly	Gly	Pro	Gln	Gln	Gly	Ser	Thr	Glu	His	Pro	Gly	Gly	Gln
1				5				10					15		
Arg	Thr	Glu	Asp	Pro	Pro	Arg	Gly	Pro	Lys	Gln	Val	Gln	Gly	Ser	Arg
			20					25					30		
Gln	Asp	Pro	Ala	Cys	Glu	Pro	His	Arg	Asp	Asn	Arg	Gly	Asp	His	Pro
		35					40					45			
Ala	Tyr	Gln	Gly	Gly	Gln	His	Cys	Gly	Ser	His	Leu	His	Lys	Asp	Asp
	50					55					60				
Leu	Val	His	Pro	Thr	Pro	Ala	Gln	Ser	Asp	Ala	Phe	Glu	Ala	Gly	His
65					70					75				80	
Gln	Ile	Thr	Val	Gly	Gly	Ser	Leu	Leu	Leu	Arg	Gln	Gln	Ala	Arg	His
			85					90						95	
Asp	Gly	Arg	Gln	His	Asp	Glu	Gly	Asp	Gly	Arg	Asp	Asp	Gly	Asp	Arg
			100					105					110		
Trp	Gln	Arg	Asp	Ile	Thr	Glu	Asp	Ser	Gly	Gly	His	Asp	Ile	Lys	Phe
		115					120					125			
Pro	Gln	Pro	Val	Arg	Leu	Arg	Pro	Leu	Val	Gly	Gln	Ser	Ile	Leu	Ile
	130					135					140				
Gly	Gly	Gln	Pro	Cys	Glu	Gln	Asn	Arg	Arg	Ser	Ser	Ala	Ser	Trp	Tyr
145				150						155				160	
Ser	Gly	Phe	Arg	Arg	Pro	Gly	Asp	Ala	Leu	Asp	Pro	Ala	Gln	Ile	Ile
			165					170					175		
Arg	Gln	Pro	Asp	Gly	Val	Cys	Arg	Val	Gly	Pro	Gly	Gly	Ile	Ile	Gly
		180					185						190		
Gln	Val	Pro	Ala												



195

<210> 1313  
 <211> 367  
 <212> DNA  
 <213> Homo sapiens

<400> 1313  
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 120  
 aaggaaggga gaggacagag cctggtgtga ctctggggtt tctggtgtgt atagctggtg  
 180  
 gacagtgggtg tctttgccaa gaggggagcc ctggaagagg agaggtttgc agggcaggtg  
 240  
 ctgagtccgg ttttggacac gctgaatttg aggtatctgt cagatatgag acccaaaagg  
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 tgagggcggg gaagtggatg tgcaggccct gagctctggg aggggtctgg gtatgctgtg  
 360  
 gtcatga  
 367

<210> 1314  
 <211> 121  
 <212> PRT  
 <213> Homo sapiens

<400> 1314  
 Met Thr Thr Ala Tyr Pro Asp Pro Ser Gln Ser Ser Gly Pro Ala His  
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 Pro Leu Pro Arg Pro His Leu Leu Gly Leu Ile Ser Asp Arg Tyr Leu  
 20 25 30  
 Lys Phe Ser Val Ser Lys Thr Gly Leu Ser Thr Cys Pro Ala Asn Leu  
 35 40 45  
 Ser Ser Ser Arg Ala Pro Leu Leu Ala Lys Thr Pro Leu Ser Thr Ser  
 50 55 60  
 Tyr Thr His Gln Lys Pro Arg Ser His Thr Arg Leu Cys Pro Leu Pro  
 65 70 75 80  
 Ser Leu Pro Pro Pro Ser Ile Leu Ser Pro Lys Ser Arg Asp Cys Pro  
 85 90 95  
 Thr Leu Ala Ala Thr Thr Ala Ala Ala Pro Ala Ala Pro Pro Ala Pro  
 100 105 110  
 Ala Thr Trp Arg Gly Cys Met Asp Ile  
 115 120

<210> 1315  
 <211> 5245  
 <212> DNA  
 <213> Homo sapiens

<400> 1315  
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120  
gaagctttga gtccttgtcc aagtactgta agtaccaagt ctccagccagg cagcagtgct  
180  
tcttctagtt ctggagttaa aatgaccagc tttgctgaac aaaaattcag gaaactgaat  
240  
cataccgatg gaaaaagtag tgggaagcagt tctcaaaaaa ctacaccaga aggctctgaa  
300  
cttaatatcc ctcatgtggt tgcttgggca caaattccag aagaaacagg gcttccacag  
360  
ggacgggaca ctaccagct gttggcctct gaaatgggtgc atcttaggat gaaactagaa  
420  
gaaaagaggc gtgctataga agcccagaaa aagaaaatgg aagctgcttt taccaaacag  
480  
agacagaaaa tgggaaggac agcattcctt actgtagtga aaaagaaagg ggatgggata  
540  
tctcctctac gagaggaagc ggcggtgca gaagatgaga aagtatatac tgatcgagca  
600  
aaagaaaagg aatcacaaaa aactgatgga caaaggagca agtcactggc agatataaaa  
660  
gagagcatgg agaatcctca agccaaatgg cttaaagtctc caactacacc tattgatcct  
720  
gagaagcagt ggaacctggc aagcccctca gaagaaactt taaatgaagg agagatttta  
780  
gaatatacca aatccattga aaagttaaat tcatccctgc attttctaca acaagaaatg  
840  
caacgcttgt cacttcagca ggagatgtta atgcagatga gagagcaaca atcttgggtg  
900  
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960  
gcaggcctgt catcagccat tgcaccattc tcctcagact cccctcgtcc tactcaccca  
1020  
tctccacagt cttctaacag gaaaagtgca tctttttctg ttaaaagtca aaggactcct  
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aggccaaatg agttaaaaaat aacacctttg aatcgaacct tgacacctcc tcggtctgtg  
1140  
gatagccttc ctcggttaag gaggttttca ccaagtcaag ttcctattca aactagggtca  
1200  
tttgtatgtt ttggggatga tggagaacct cagttaaagg aatccaaacc taaagaggaa  
1260  
gttaaaaaag aggaattgga atccaaaggg actttggaac agcgtggaca taatccagaa  
1320  
gaaaaggaaa tcaaaccctt tgagtcaaca gtctctgaag tcctatcact gcctgtcaca  
1380  
gagactgtat gtctgacacc aaatgaggac caattgaatc aaccacaga acccctcct  
1440  
aaacccgttt tcccaccac tgctccaaaa aatgttaatc tgattgaagt ttccctctca  
1500  
gatttgaaac cccctgaaaa ggctgatgta cctgttgaaa aatatgatgg agaaagtgat  
1560  
aaagaacaat ttgatgatga ccagaaagta tgctgtggat tcttttttaa ggatgatcaa  
1620  
aaagcagaaa atgatatggc aatgaaacgg gcagctttgt tggagaaaag attaagaagg  
1680

gaaaaggaaa ctcagctccg gaaacaacag ttggaagcag aaatggagca taagaaggag  
1740  
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1800  
gaattttatta ggcaagaata tatgaggcgg aaacaactga aactaatgga agatatggat  
1860  
acagtaatta aaccccgctc tcaagtagta aaacaaaaaa aacagcgacc aaaatctatt  
1920  
cacagagatc atattgaatc ccccaaaaca ccaataaagg gtcctccagt ctctagcctt  
1980  
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 <213> Homo sapiens

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 Lys Ser Gln Pro Gly Ser Ser Ala Ser Ser Ser Ser Gly Val Lys Met  
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 Thr Ser Phe Ala Glu Gln Lys Phe Arg Lys Leu Asn His Thr Asp Gly  
 65 70 75 80  
 Lys Ser Ser Gly Ser Ser Ser Gln Lys Thr Thr Pro Glu Gly Ser Glu  
 85 90 95  
 Leu Asn Ile Pro His Val Val Ala Trp Ala Gln Ile Pro Glu Glu Thr  
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 Gly Leu Pro Gln Gly Arg Asp Thr Thr Gln Leu Leu Ala Ser Glu Met  
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 Val His Leu Arg Met Lys Leu Glu Glu Lys Arg Arg Ala Ile Glu Ala  
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 Gly Arg Thr Ala Phe Leu Thr Val Val Lys Lys Lys Gly Asp Gly Ile  
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 Ser Pro Leu Arg Glu Glu Ala Ala Gly Ala Glu Asp Glu Lys Val Tyr  
 180 185 190  
 Thr Asp Arg Ala Lys Glu Lys Glu Ser Gln Lys Thr Asp Gly Gln Arg  
 195 200 205  
 Ser Lys Ser Leu Ala Asp Ile Lys Glu Ser Met Glu Asn Pro Gln Ala  
 210 215 220  
 Lys Trp Leu Lys Ser Pro Thr Thr Pro Ile Asp Pro Glu Lys Gln Trp  
 225 230 235 240  
 Asn Leu Ala Ser Pro Ser Glu Glu Thr Leu Asn Glu Gly Glu Ile Leu  
 245 250 255  
 Glu Tyr Thr Lys Ser Ile Glu Lys Leu Asn Ser Ser Leu His Phe Leu  
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 Gln Gln Glu Met Gln Arg Leu Ser Leu Gln Gln Glu Met Leu Met Gln

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Gln	Lys	Gln	Ile	Arg	Asp	Phe	Lys	Pro	Ser	Lys	Gln	Ala	Gly	Leu	Ser
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Ser	Ala	Ile	Ala	Pro	Phe	Ser	Ser	Asp	Ser	Pro	Arg	Pro	Thr	His	Pro
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Ser	Pro	Gln	Ser	Ser	Asn	Arg	Lys	Ser	Ala	Ser	Phe	Ser	Val	Lys	Ser
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Gln	Leu	Arg	Lys	Gln	Gln	Leu	Glu	Ala	Glu	Met	Glu	His	Lys	Lys	Glu
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Glu	Thr	Arg	Arg	Lys	Thr	Glu	Glu	Glu	Arg	Gln	Lys	Lys	Glu	Asp	Glu
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625					630					635					640
Ile	Glu	Ser	Pro	Lys	Thr	Pro	Ile	Lys	Gly	Pro	Pro	Val	Ser	Ser	Leu
				645					650					655	
Ser	Leu	Ala	Ser	Leu	Asn	Thr	Gly	Asp	Asn	Glu	Ser	Val	His	Ser	Gly
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Ala His Cys Cys Leu Ala Gly Lys Val Asn Glu Gly Gln Lys Lys Lys
              740              745              750
Ile Leu Glu Glu Met Glu Lys Ser Asp Ala Asn Asn Phe Leu Ile Leu
              755              760              765
Phe Arg Asp Ser Gly Cys Gln Phe Arg Ser Leu Tyr Thr Tyr Cys Pro
              770              775              780
Glu Thr Glu Glu Ile Asn Lys Leu Thr Gly Ile Gly Pro Lys Ser Ile
785              790              795              800
Thr Lys Lys Met Ile Glu Gly Leu Tyr Lys Tyr Asn Ser Asp Arg Lys
              805              810              815
Gln Phe Ser His Ile Pro Ala Lys Thr Leu Ser Ala Ser Val Asp Ala
              820              825              830
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<210> 1317
<211> 1123
<212> DNA
<213> Homo sapiens

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720
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<211> 285

<212> PRT

<213> Homo sapiens

<400> 1318

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Asp	Ala	Thr	Ala	Val	Ala	Gly	Ile	Glu	Thr	Lys	Lys	Glu	Lys	Glu	Asp
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Gly	Glu	Glu	Leu	Asp	Gly	Ser	Asp	Met	Ser	Ala	Ile	Ile	Tyr	Glu	Ile
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Pro	Lys	Glu	Pro	Glu	Lys	Arg	Arg	Arg	Ser	Lys	Arg	Ser	Arg	Val	Met
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Lys	Lys	Phe	Tyr	Leu	Ser	Asn	His	Leu	Arg	Arg	His	Met	Ile	Ile	His
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Pro	Leu	Gln	Cys	Val	Ile	Cys	Gly	Tyr	Gln	Cys	Arg	Gln	Arg	Ala	Ser
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Leu	Asn	Trp	His	Met	Lys	Lys	His	Thr	Ala	Glu	Val	Gln	Tyr	Asn	Phe
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 <212> DNA  
 <213> Homo sapiens

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 <213> Homo sapiens

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 Glu Ser Gly Val Asp Ala Lys Ser Glu Ser Ser Trp Gly Gly Thr Gln  
 50 55 60  
 Lys Pro Trp Asp Gly Val Cys Met Gly Met Cys Arg Glu Ala Ala Thr  
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 Met Gly Leu Gly Leu Pro Phe Ser Pro Ser Cys Pro Pro Pro Pro Ser  
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 Pro Ser Leu Leu Pro Ser Phe Trp Lys Pro Ser Thr Gly Gly Asn Thr  
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&lt;211&gt; 1292

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1321

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1292

&lt;210&gt; 1322

&lt;211&gt; 317

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1322

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Ala Tyr Gly Arg His Arg Gly Glu Ile Val Asp Ala Ser Ser Ala Gln
      65           70           75           80
Arg Tyr Val Ala Glu Gly Ala Tyr Arg Thr Thr Ala Ile Ala Ser Leu
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Glu Leu Ala Arg Glu Glu Leu Gly Thr Pro His Ala Arg Arg Met Met
      115          120          125
Leu Pro Ile Leu Asp His Leu Val Ala Ala Val His Arg Ala Lys Gln
      130          135          140
Gly Ala Val Ile Asp Phe Pro Leu Glu Trp Glu Val Arg Gln Leu Tyr
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Pro Asp Glu Ala Glu Leu Gly Arg Arg Ala Val Glu Ile Val Asp Gly
      165          170          175
Ala Leu Glu Ile His Leu Gln Pro Glu Glu Trp Val Ala Phe Ser Leu
      180          185          190
His Phe Ile Asn Gln Arg Trp Asp Ser Arg Asp Val Ser Arg Thr Met
      195          200          205
Ser Met Thr Gln Thr Ile Cys Asp Val Phe Thr Glu Leu Glu Asp Leu
      210          215          220
Trp His Val Glu Ile Asp Arg Ser Ser Met Ser Ala Ser Arg Phe Val
      225          230          235          240
Thr His Leu Arg Tyr Leu Phe Ala Arg Ala Ser Asp Asn Lys Gln Leu
      245          250          255
Ser His Val Asp Leu Asp Ile Val Gly Leu Met Ser Asp Arg Tyr Pro
      260          265          270
Glu Ala Thr Leu Ala Ala Ser Gln Val Ala Glu His Ile Ser Lys Ala
      275          280          285
Ile Gly Asn Asp Leu Thr Glu Ala Glu Ile Asn Tyr Ile Ala Leu His
      290          295          300
Thr Thr Arg Leu Tyr Asn Glu Val Met Gly Met Asp Asp
      305          310          315

```

&lt;210&gt; 1323

&lt;211&gt; 306

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1323

```

cgcgtgatgg gaatgcgtca ctatgatggt cagttgattg gtggtatcac tctgcacgaa
60
ggcaaaattg ctgagatgcg tacagggtgaa ggtaaaaccc tgatgggtac tttagcgtgt
120

```

tacctcaatg cattgagtggt tcaggggtgtg catgtcatca ccgtcaatga ctatcttgca  
 180  
 caacgtgatg ctgaactcaa ccgcccata tttgagtttt tgggtttaag catcgggtgtg  
 240  
 atttattcga tgcaaatgcc tgctgagaaa gcacaagott atttagcaga cattaacttac  
 300  
 ggtacc  
 306

<210> 1324  
 <211> 102  
 <212> PRT  
 <213> Homo sapiens

<400> 1324  
 Arg Val Met Gly Met Arg His Tyr Asp Val Gln Leu Ile Gly Gly Ile  
 1 5 10 15  
 Thr Leu His Glu Gly Lys Ile Ala Glu Met Arg Thr Gly Glu Gly Lys  
 20 25 30  
 Thr Leu Met Gly Thr Leu Ala Cys Tyr Leu Asn Ala Leu Ser Gly Gln  
 35 40 45  
 Gly Val His Val Ile Thr Val Asn Asp Tyr Leu Ala Gln Arg Asp Ala  
 50 55 60  
 Glu Leu Asn Arg Pro Leu Phe Glu Phe Leu Gly Leu Ser Ile Gly Val  
 65 70 75 80  
 Ile Tyr Ser Met Gln Met Pro Ala Glu Lys Ala Gln Ala Tyr Leu Ala  
 85 90 95  
 Asp Ile Thr Tyr Gly Thr  
 100

<210> 1325  
 <211> 391  
 <212> DNA  
 <213> Homo sapiens

<400> 1325  
 gtgcacatgg gccactggc gaatccgacg cgcggcctac ggcgcgcaat actggcggcc  
 60  
 attgtcgccg catgttccgt ctccgctcat gccggaagct ggccagagaa accgatcacg  
 120  
 atggtcgtgc cgtttcccgc cggaggcggc accgatctcg tggcgcgctc gatccagccg  
 180  
 cttttgcagc gcgaactcgg acaaccgggtg gtgatcgaca accgcagcgg cgcaggcggc  
 240  
 acgctcgggt ccagcttcgt ggcgcggggc gttgccgacg gctacacggc tggcgtggtc  
 300  
 accacgagca cccacgcggt aagcgtcgcg ctctatcccc ggctggccta caacccgaca  
 360  
 gcggactttg catacgccgg cttcatcggc n  
 391

<210> 1326  
 <211> 130  
 <212> PRT

<213> Homo sapiens

<400> 1326

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Val His Met Gly Pro Leu Ala Asn Pro Thr Arg Gly Leu Arg Arg Ala
 1           5           10           15
Ile Leu Ala Ala Ile Val Ala Ala Cys Ser Val Ser Ala His Ala Gly
          20           25           30
Ser Trp Pro Glu Lys Pro Ile Thr Met Val Val Pro Phe Pro Ala Gly
          35           40           45
Gly Gly Thr Asp Leu Val Ala Arg Ser Ile Gln Pro Leu Leu Gln Arg
          50           55           60
Glu Leu Gly Gln Pro Val Val Ile Asp Asn Arg Ser Gly Ala Gly Gly
65           70           75           80
Thr Leu Gly Ser Ser Phe Val Ala Arg Ala Val Ala Asp Gly Tyr Thr
          85           90           95
Ala Gly Val Val Thr Thr Ser Thr His Ala Val Ser Val Ala Leu Tyr
          100          105          110
Pro Arg Leu Ala Tyr Asn Pro Thr Ala Asp Phe Ala Tyr Ala Gly Phe
          115          120          125
Ile Gly
          130

```

<210> 1327

<211> 324

<212> DNA

<213> Homo sapiens

<400> 1327

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nnacgcgtga tttcggaaact gcagcagttc gagcagtcgc atggacagag cgacgggagc
60
tactggctat gggttcgagct gctgtggcga gactatttcc gctttctgca tcttcggcat
120
ggcgctcggc tgtaccgcgc acgcggcctc gcaaatgagg tacggcacgc ggagcgccca
180
gatgtgcagg gcttcgagcg ctggcgctcg gcacgcaccg gcgagccgct cgtcgatgcc
240
gcgatgcgcg agctggagac caccggctac ctcagcaaca ggctcagaca ggtggtcgcg
300
agctacctcg tgcacgagct ggga
324

```

<210> 1328

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1328

```

Xaa Arg Val Ile Ser Glu Leu Gln Gln Phe Glu Gln Ser His Gly Gln
 1           5           10           15
Ser Asp Gly Ser Tyr Trp Leu Trp Phe Glu Leu Leu Trp Arg Asp Tyr
          20           25           30
Phe Arg Phe Leu His Leu Arg His Gly Ala Arg Leu Tyr Arg Ala Arg
          35           40           45
Gly Leu Ala Asn Glu Val Arg His Ala Glu Arg Pro Asp Val Gln Gly

```

50		55		60
Phe Glu Arg Trp Arg Arg	Ala Ser Thr Gly Glu	Pro Leu Val Asp Ala		
65	70	75	80	
Ala Met Arg Glu Leu Thr Thr Gly Tyr Leu Ser Asn Arg Leu Arg				
	85	90	95	
Gln Val Val Ala Ser Tyr Leu Val His Glu Leu Gly				
100	105			

&lt;210&gt; 1329

&lt;211&gt; 438

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1329

```

ngtgcacgct tagcattaga tttagcttcc agtggcaaaa ctacgtcggt gatttcaagc
60
ggcgatatcg gcatttacgc gatggcgacc ctggtgtttg aactgctgga tagacaactc
120
cagggccttg aagaccatcc tgaatggta gatgttgaaa tcgatgtggt acctggcatc
180
tctgcaatgc aagctggtgc aagtcgtatt ggtgcgatgt taggtcatga cttttgtacg
240
gtgagtttgt ctgatttatt aacccttgg gaaactatta ataaacgtat tcatagtgca
300
ggtgaggggg attttgttat ctctttttat aaccctgttt ctaagaaacg tgattggcag
360
cttaaccacg cgcgtgatgt attattgaaa taccgtccag catcaacgcc agttttatta
420
ggtcgtcagt tgacgcgt
438

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&lt;210&gt; 1330

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1330

Xaa Ala Arg Leu Ala Leu Asp Leu Ala Ser Ser Gly Lys Thr Thr Ser	
1	5 10 15
Leu Ile Ser Ser Gly Asp Ile Gly Ile Tyr Ala Met Ala Thr Leu Val	
	20 25 30
Phe Glu Leu Leu Asp Arg Gln Leu Gln Gly Leu Glu Asp His Pro Glu	
	35 40 45
Trp Leu Asp Val Glu Ile Asp Val Val Pro Gly Ile Ser Ala Met Gln	
	50 55 60
Ala Gly Ala Ser Arg Ile Gly Ala Met Leu Gly His Asp Phe Cys Thr	
65	70 75 80
Val Ser Leu Ser Asp Leu Leu Thr Pro Trp Glu Thr Ile Asn Lys Arg	
	85 90 95
Ile His Ser Ala Gly Glu Gly Asp Phe Val Ile Ser Phe Tyr Asn Pro	
	100 105 110
Val Ser Lys Lys Arg Asp Trp Gln Leu Asn His Ala Arg Asp Val Leu	
	115 120 125
Leu Lys Tyr Arg Pro Ala Ser Thr Pro Val Leu Leu Gly Arg Gln Leu	

130 135 140  
 Thr Arg  
 145  
  
 <210> 1331  
 <211> 453  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 1331  
 gcgtaccgct ccgcggaact ggtgatgatg accgaggcac cgggatgcgg aatcccctgg  
 60  
 catcttcttg ccggcatcgg acgcatcgaa tccgggtcacg ccaacggcgg caagacgacc  
 120  
 tcggtgggta cgaacgtcac cccgatcctc ggcccatcc tcgacggacg gctggcaggc  
 180  
 aacgaagtca ttcgggacac cgacaagggc aatcgacggc gaccactca cgaccgcgcc  
 240  
 gtcgggccga tgcagttcat tccggccacc tgggccggat atgccagcga cggcaacggg  
 300  
 gacggaatca aggaccccaa caacgtcttc gatgcggcac tctcggcagc gaagtacctc  
 360  
 tgcagcggcg gactcaacct gcgcgatgtc gccaggaga ccaaagctgt tctgcgatac  
 420  
 aacaactcgg ccgcttacgc agcaaactgtg atc  
 453  
  
 <210> 1332  
 <211> 151  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 1332  
 Ala Tyr Arg Ser Ala Glu Leu Val Met Met Thr Glu Ala Pro Gly Cys  
 1 5 10 15  
 Gly Ile Pro Trp His Leu Leu Ala Gly Ile Gly Arg Ile Glu Ser Gly  
 20 25 30  
 His Ala Asn Gly Gly Lys Thr Thr Ser Val Gly Thr Asn Val Thr Pro  
 35 40 45  
 Ile Leu Gly Pro Ile Leu Asp Gly Arg Leu Ala Gly Asn Glu Val Ile  
 50 55 60  
 Arg Asp Thr Asp Lys Gly Asn Arg Arg Arg Pro Thr His Asp Arg Ala  
 65 70 75 80  
 Val Gly Pro Met Gln Phe Ile Pro Ala Thr Trp Ala Gly Tyr Ala Ser  
 85 90 95  
 Asp Gly Asn Gly Asp Gly Ile Lys Asp Pro Asn Asn Val Phe Asp Ala  
 100 105 110  
 Ala Leu Ser Ala Ala Lys Tyr Leu Cys Ser Gly Gly Leu Asn Leu Arg  
 115 120 125  
 Asp Val Ala Gln Glu Thr Lys Ala Val Leu Arg Tyr Asn Asn Ser Ala  
 130 135 140  
 Ala Tyr Ala Ala Asn Val Ile  
 145 150

<210> 1333  
 <211> 540  
 <212> DNA  
 <213> Homo sapiens

<400> 1333  
 acgcgtcgcc cacactgttg ccgccgaggc ggctcgagcc ggggtgtgagg aaggatccgc  
 60  
 ggcacagctc gtcggtcaag atgggtctag tgctgctcgt atggcggcgg aggcattccgc  
 120  
 gcgaagggct aaagcggatg gactaagcca gcttgtcatc gatgtcaatg gagacgccgt  
 180  
 cagcgtcgcg acggaaatca cccggcctac tcgtctatta gcccttattg gactaaccga  
 240  
 agtacacggt cgggcgagcg aaatgtgtat tttgctggct cgctgaggcc gttgcagcga  
 300  
 tacaatgatg aggtgtctaa gtatttttccg gtccacccgg agaaccgcga gcagcgttct  
 360  
 ctcaatcaga tcgtcgacat cctgcaccat ggcggtctta tcgcctaccc gacagacacg  
 420  
 gggttatgcct tcggtgcccc gntaggggaat aaggatgccg tggaccggat tcgcaaactt  
 480  
 cgccagttat ttgacaagca tcacttcacc ctgggtcatga gccagtttgc gcaggttggc  
 540

<210> 1334  
 <211> 70  
 <212> PRT  
 <213> Homo sapiens

<400> 1334  
 Val His Pro Glu Asn Pro Gln Gln Arg Ser Leu Asn Gln Ile Val Asp  
 1 5 10 15  
 Ile Leu His His Gly Gly Leu Ile Ala Tyr Pro Thr Asp Thr Gly Tyr  
 20 25 30  
 Ala Phe Gly Ala Arg Xaa Gly Asn Lys Asp Ala Val Asp Arg Ile Arg  
 35 40 45  
 Lys Leu Arg Gln Leu Phe Asp Lys His His Phe Thr Leu Val Met Ser  
 50 55 60  
 Gln Phe Ala Gln Val Gly  
 65 70

<210> 1335  
 <211> 748  
 <212> DNA  
 <213> Homo sapiens

<400> 1335  
 nctctcatac tttttttccc tattcctatc cccctctct cgcaccgcgt gaagcgttct  
 60  
 gtgaatgccca agaagaagcg tcgtgaggtc ctcgatcagg cctccgggta ccgtgggtcag  
 120  
 cgctcgcgcc tgtaccgcaa ggccaaggag cagaccctcc attcggccac ttattcgttc  
 180



cgtgaccgtc gtgctaagaa gggtgacttc cgctcgctgt ggatccagcg catcaatgct  
 240  
 gcttcccgtg cccagggcat gacctacaac cgtttcatca acggtctgaa gaacgctggc  
 300  
 gtcgaggtcg accgcaagat gctcgctgag cttgccgtct ccgacattaa cgccttcaac  
 360  
 agcctggctg aggtcgctaa ggctagccag ccgcagaacg ctgctgcctg agatggccat  
 420  
 gactggcggg ccgaacgacg actatttggg atgggatcgc atctcgaagg ggtcattgcg  
 480  
 ttccggcccg cgtctttcat ctccggcggg acgcgatgag tccgggctgt tcttggtaga  
 540  
 aggtgcgcag gcagttcgtg aagccctagc atggccgggt aaagtcaatt tgttggcaac  
 600  
 ctccgaccca gctcgcatg ctgagcatgt cgaggtggct acatgtcgtg gcgttcgggt  
 660  
 cgtggtgctc actgacgagg atgtcaatgc gctttctgat accgtcacca gtcaggggat  
 720  
 cttcgcggta tgcggcagg ttacgcgt  
 748

<210> 1336

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1336

Xaa	Leu	Ile	Leu	Phe	Phe	Pro	Ile	Pro	Ile	Pro	Pro	Leu	Ser	Asp	Arg
1				5					10					15	
Val	Lys	Arg	Ser	Val	Asn	Ala	Lys	Lys	Lys	Arg	Arg	Glu	Val	Leu	Asp
			20					25					30		
Gln	Ala	Ser	Gly	Tyr	Arg	Gly	Gln	Arg	Ser	Arg	Leu	Tyr	Arg	Lys	Ala
		35				40						45			
Lys	Glu	Gln	Thr	Leu	His	Ser	Ala	Thr	Tyr	Ser	Phe	Arg	Asp	Arg	Arg
	50					55					60				
Ala	Lys	Lys	Gly	Asp	Phe	Arg	Ser	Leu	Trp	Ile	Gln	Arg	Ile	Asn	Ala
65					70					75				80	
Ala	Ser	Arg	Ala	Gln	Gly	Met	Thr	Tyr	Asn	Arg	Phe	Ile	Asn	Gly	Leu
			85						90					95	
Lys	Asn	Ala	Gly	Val	Glu	Val	Asp	Arg	Lys	Met	Leu	Ala	Glu	Leu	Ala
		100						105					110		
Val	Ser	Asp	Ile	Asn	Ala	Phe	Asn	Ser	Leu	Val	Glu	Val	Ala	Lys	Ala
		115					120					125			
Ser	Gln	Pro	Gln	Asn	Ala	Ala	Ala								
	130					135									

<210> 1337

<211> 364

<212> DNA

<213> Homo sapiens

<400> 1337

acgcgtgagg ccaggccact gggcaccgcc gttagccagg gcagcctcct tcagtgggtca  
 60

aggcagactc agtcatggg cgagcatgtc agtgaagggc acagcaaggc tcacgagtgg  
 120  
 gcctcttgcc tcatggtcag tgtgggtcag tgccttcgct gtatgagact acagggtttc  
 180  
 tctgcctcac catgggggac gattgggtct gggtcacttc ctgctgtggg acctgtcctg  
 240  
 ggcaactgcag gatgtggggc agggctccta cgtgccagct accagatgcc agcagcaccc  
 300  
 ccagaagtga caaccacaac catctccagg tgttgccagt gtcccctggg ggtcagagtg  
 360  
 gccc  
 364

<210> 1338  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 1338  
 Met Gly Glu His Val Ser Glu Gly His Ser Lys Ala His Glu Trp Ala  
 1 5 10 15  
 Ser Cys Leu Met Val Ser Val Gly Gln Cys Phe Arg Cys Met Arg Leu  
 20 25 30  
 Gln Gly Phe Ser Ala Ser Pro Trp Gly Thr Ile Gly Ser Gly Ser Leu  
 35 40 45  
 Pro Ala Val Gly Pro Val Leu Gly Thr Ala Gly Cys Gly Ala Gly Leu  
 50 55 60  
 Leu Arg Ala Ser Tyr Gln Met Pro Ala Ala Pro Pro Glu Val Thr Thr  
 65 70 75 80  
 Thr Thr Ile Ser Arg Cys Cys Gln Cys Pro Leu Gly Val Arg Val Ala  
 85 90 95

<210> 1339  
 <211> 653  
 <212> DNA  
 <213> Homo sapiens

<400> 1339  
 cgcgttgtct tcaacatcga cgaaaagcag tgcattgacc tggcgccacg tgggtactgag  
 60  
 tgggtcgta ggtacgccga caagtacctc ggcgacgttg agttcggcta cgagtactct  
 120  
 ccggagatgt ttagccagac ccgcacggac ttcgctatcg acgtctgtca ctccgtgatg  
 180  
 gacgtgtggc agccggggcc aggcggtgag attatcctta atctgcgggc taccgtcgag  
 240  
 atgagtactc cgaacaccta cgcgaccaa atcgagtact tctgcgcaa tatccgtgat  
 300  
 cgtgagcacg tgtgcgtctc tttgcacccg cacaatgatc gtggcacggc gatcgcggcc  
 360  
 gccgagttcg cgcagatggc gggcgccgat cgcgtcgagg gctgtttctt tggccccggc  
 420  
 ggcgccccgg gcaccgtcga cctggtcacc ctgggcatga acctcgtcag ccagggagtt  
 480

gacgcgggta tgcatttctc cgacatgccc aagatccgcc gcaccgtcga gtactgcacc  
 540  
 tgtctgccag taccggcccg ccagccctac tccggcgatc tggctttcac cgccttctcc  
 600  
 ggttcccacc aggacgccat caagaagggt ctggaagacc tggcccggcg cgc  
 653

<210> 1340  
 <211> 217  
 <212> PRT  
 <213> Homo sapiens

<400> 1340  
 Arg Val Val Phe Asn Ile Asp Glu Lys Gln Cys Ile Asp Leu Ala His  
 1 5 10 15  
 Arg Gly Thr Glu Trp Val Val Arg Tyr Ala Asp Lys Tyr Leu Gly Asp  
 20 25 30  
 Val Glu Phe Gly Tyr Glu Tyr Ser Pro Glu Met Phe Ser Gln Thr Arg  
 35 40 45  
 Thr Asp Phe Ala Ile Asp Val Cys His Ser Val Met Asp Val Trp Gln  
 50 55 60  
 Pro Gly Pro Gly Arg Glu Ile Ile Leu Asn Leu Pro Ala Thr Val Glu  
 65 70 75 80  
 Met Ser Thr Pro Asn Thr Tyr Ala Asp Gln Ile Glu Tyr Phe Cys Arg  
 85 90 95  
 Asn Ile Arg Asp Arg Glu His Val Cys Val Ser Leu His Pro His Asn  
 100 105 110  
 Asp Arg Gly Thr Ala Ile Ala Ala Ala Glu Phe Ala Gln Met Ala Gly  
 115 120 125  
 Ala Asp Arg Val Glu Gly Cys Phe Phe Gly Pro Gly Glu Arg Pro Gly  
 130 135 140  
 Thr Val Asp Leu Val Thr Leu Gly Met Asn Leu Val Ser Gln Gly Val  
 145 150 155 160  
 Asp Ala Gly Ile Asp Phe Ser Asp Met Pro Lys Ile Arg Arg Thr Val  
 165 170 175  
 Glu Tyr Cys Thr Cys Leu Pro Val Pro Ala Arg Gln Pro Tyr Ser Gly  
 180 185 190  
 Asp Leu Val Phe Thr Ala Phe Ser Gly Ser His Gln Asp Ala Ile Lys  
 195 200 205  
 Lys Gly Leu Glu Asp Leu Ala Arg Arg  
 210 215

<210> 1341  
 <211> 666  
 <212> DNA  
 <213> Homo sapiens

<400> 1341  
 accggttgct gatttccttg ttggagtctt caccactatg agcagtgact ccattgtttt  
 60  
 gcaaagtttc ttgccttgct ttgatcatat tttcacaact ggattcccaa cagaagtgtg  
 120  
 gcaatctgta atagaaaagt tggcaaagaa aggattatgg cattcatttc tgcttctgtc  
 180

agcaaaaaaa gaccgattac caagaaatat tcatgtccca gagttatcac tgaaaagtct  
 240  
 ctttgagaaa tacgttttca ttggacttta tgagaagatg gaacaagtgc ccaagttagt  
 300  
 ccagtggctc atctccattg gtgcaagtgt tgagactata ggaccgtatc cccttcatgc  
 360  
 cctcatgcga ctctgtatcc aagccagaga aaaccatctt ttccgggtggg taatggatca  
 420  
 caagccccgag tggaaaggcc gcattaacca gaaggatggg gatggctgca ctgtcctgca  
 480  
 cgctgctgct gccactccc caggatacct cgtaagcga caaacagagg atgtgcagat  
 540  
 gctcctgcgc tttggggcag atcccacttt gctggatcga cagtctcggt ctgttggtga  
 600  
 tgtcctgaag aggaataaga acttcaaagc catcgagaaa atcaacagtc acttagaaaa  
 660  
 gctagc  
 666

<210> 1342

<211> 209

<212> PRT

<213> Homo sapiens

<400> 1342

Met	Ser	Ser	Asp	Ser	Ile	Val	Leu	Gln	Ser	Phe	Leu	Pro	Cys	Phe	Asp
1				5					10					15	
His	Ile	Phe	Thr	Thr	Gly	Phe	Pro	Thr	Glu	Val	Trp	Gln	Ser	Val	Ile
			20					25					30		
Glu	Lys	Leu	Ala	Lys	Lys	Gly	Leu	Trp	His	Ser	Phe	Leu	Leu	Leu	Ser
			35				40					45			
Ala	Lys	Lys	Asp	Arg	Leu	Pro	Arg	Asn	Ile	His	Val	Pro	Glu	Leu	Ser
			50				55				60				
Leu	Lys	Ser	Leu	Phe	Glu	Lys	Tyr	Val	Phe	Ile	Gly	Leu	Tyr	Glu	Lys
65					70					75				80	
Met	Glu	Gln	Val	Pro	Lys	Leu	Val	Gln	Trp	Leu	Ile	Ser	Ile	Gly	Ala
				85					90					95	
Ser	Val	Glu	Thr	Ile	Gly	Pro	Tyr	Pro	Leu	His	Ala	Leu	Met	Arg	Leu
			100					105					110		
Cys	Ile	Gln	Ala	Arg	Glu	Asn	His	Leu	Phe	Arg	Trp	Leu	Met	Asp	His
			115				120						125		
Lys	Pro	Glu	Trp	Lys	Gly	Arg	Ile	Asn	Gln	Lys	Asp	Gly	Asp	Gly	Cys
			130				135					140			
Thr	Val	Leu	His	Val	Val	Ala	Ala	His	Ser	Pro	Gly	Tyr	Leu	Val	Lys
145					150					155				160	
Arg	Gln	Thr	Glu	Asp	Val	Gln	Met	Leu	Leu	Arg	Phe	Gly	Ala	Asp	Pro
				165					170					175	
Thr	Leu	Leu	Asp	Arg	Gln	Ser	Arg	Ser	Val	Val	Asp	Val	Leu	Lys	Arg
			180					185					190		
Asn	Lys	Asn	Phe	Lys	Ala	Ile	Glu	Lys	Ile	Asn	Ser	His	Leu	Glu	Lys
			195					200					205		
Leu															

<210> 1343  
 <211> 270  
 <212> DNA  
 <213> Homo sapiens

<400> 1343  
 ccggaaatgt gccgagttct cctgacgcac gaagtgatgt gtagtcgatg ctgcgaaaag  
 60  
 aaaagctgtg gaaaccgaaa tgagactcca tcggacccag tcataattga cagattcttt  
 120  
 ttaaaatttt tcttcaagtg caatcagaat tgtttgaaaa cagcaggaaa cccaagggac  
 180  
 atgagacggt ttcaggttgt gttgtcaaca acggtgaatg tggatggaca cgtcctggct  
 240  
 gtttctgaca acatgtttgt tcataacaac  
 270

<210> 1344  
 <211> 90  
 <212> PRT  
 <213> Homo sapiens

<400> 1344  
 Pro Glu Met Cys Arg Val Leu Leu Thr His Glu Val Met Cys Ser Arg  
 1 5 10 15  
 Cys Cys Glu Lys Lys Ser Cys Gly Asn Arg Asn Glu Thr Pro Ser Asp  
 20 25 30  
 Pro Val Ile Ile Asp Arg Phe Phe Leu Lys Phe Phe Leu Lys Cys Asn  
 35 40 45  
 Gln Asn Cys Leu Lys Thr Ala Gly Asn Pro Arg Asp Met Arg Arg Phe  
 50 55 60  
 Gln Val Val Leu Ser Thr Thr Val Asn Val Asp Gly His Val Leu Ala  
 65 70 75 80  
 Val Ser Asp Asn Met Phe Val His Asn Asn  
 85 90

<210> 1345  
 <211> 402  
 <212> DNA  
 <213> Homo sapiens

<400> 1345  
 acgcgtttga aaccaccga tgacttgtcg gtgatcctgg gtaccgcgct cagcaacttc  
 60  
 agcggcaccg acaacaccga cttctacgac ccgaccaagg ccgacaaccg tctcacctac  
 120  
 cgccagacgg gcgtcgtcac gccctatgcc ggcacgtct acgacctgaa tgacatctgg  
 180  
 tcggtgtaca ccagctacac caagatctac aagccgcaga acagcaagga cgccgaccgc  
 240  
 aagttgctcg atccgattga aggtgacacc tacgaagccg ggctcaaggc agcgtttttc  
 300  
 gacggccgcc tgaacgccag ttttgccgca ttccgcatcg aacaggacaa cgtcgcacag  
 360

tacgtttccg ggtttgagac cgactcgtgt atcgcccatt gc  
402

<210> 1346  
<211> 134  
<212> PRT  
<213> Homo sapiens

<400> 1346  
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20 25 30  
Lys Ala Asp Asn Arg Leu Thr Tyr Arg Gln Thr Gly Val Val Thr Pro  
35 40 45  
Tyr Ala Gly Ile Val Tyr Asp Leu Asn Asp Ile Trp Ser Val Tyr Thr  
50 55 60  
Ser Tyr Thr Lys Ile Tyr Lys Pro Gln Asn Ser Lys Asp Ala Asp Arg  
65 70 75 80  
Lys Leu Leu Asp Pro Ile Glu Gly Asp Thr Tyr Glu Ala Gly Leu Lys  
85 90 95  
Ala Ala Phe Phe Asp Gly Arg Leu Asn Ala Ser Phe Ala Ala Phe Arg  
100 105 110  
Ile Glu Gln Asp Asn Val Ala Gln Tyr Val Ser Gly Phe Glu Thr Asp  
115 120 125  
Ser Cys Ile Ala His Cys  
130

<210> 1347  
<211> 415  
<212> DNA  
<213> Homo sapiens

<400> 1347  
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120  
tgctcttaag gaactccatc ttactgggtg gagccaaacg agaaaagaga gctcgggagg  
180  
gcaccaaagc ggtcttgccg aaattgcttg aggcagggga aggggcacgc tttctgaaaa  
240  
acccccccaa accgattcca ggaagcccaa agggcgggccc ctctgcccgcc agcactgcct  
300  
tcacgtttac ttccatcccg gctcctcct tcccctaagg cttggcatgc aacatccctg  
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415

<210> 1348  
<211> 105  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 1348

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Gly Leu Pro Gly Ile Gly Leu Gly Gly Phe Phe Arg Lys Arg Ala Pro
 20           25           30
Ser Pro Ala Ser Gly Asn Phe Gly Lys Thr Ala Leu Val Pro Ser Arg
 35           40           45
Ala Leu Phe Ser Arg Leu Ala Pro Pro Ser Lys Met Glu Phe Leu Lys
 50           55           60
Ser Lys Val Leu Gln Leu Phe Leu Ile Phe Tyr Pro Gln Pro Leu Ala
 65           70           75           80
Gly Phe Pro Arg Pro Ser Gln Ser Leu Ile Asn Ala Ser Trp Asn Glu
 85           90           95
Arg Met Arg Ala Cys Pro Glu Gly Gly
 100           105

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&lt;210&gt; 1349

&lt;211&gt; 924

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1349

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gtccagacgg tcattgcgttc gatcgccgaa aagcttggcc ttccggatcat cgtaagccg
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420
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480
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900
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924

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<210> 1350  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

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 Gly Leu Pro Val Ile Val Lys Pro Ala Arg Gly Gly Ser Ser Leu Gly  
 35 40 45  
 Val Thr Lys Val Asp Gly Val Asp Asp Leu Pro Gln Ala Val Ala Asn  
 50 55 60  
 Ala Tyr Ala Tyr Asp Asp Met Val Val Val Glu Glu Phe Ile Val Gly  
 65 70 75 80  
 Asn Glu Leu Ala Ile Gly Met Ile Thr Thr Ser Glu Gly Thr Arg Val  
 85 90 95  
 Leu Pro Ala Val Glu Ile Arg Pro Val Gly Gly Val Tyr Asp Tyr Ser  
 100 105 110  
 Ala Met Tyr Thr Gly Gly Glu Thr Arg Leu Thr Ala Pro Ala Asp Ile  
 115 120 125  
 Ser Asp Thr Ala Ala Gln Thr Ala Thr Ala Met Ala Arg Val Val Gln  
 130 135 140  
 Lys Glu Leu Asp Phe Ser Gly Ile Ser Arg Val Asp Ala Ile Val Asp  
 145 150 155 160  
 Glu Ser Gly Arg Pro Val Phe Leu Glu Ala Gly Ala Ala Pro Gly Met  
 165 170 175  
 Thr Ala Thr Ser Leu Val Pro Val Ala Met Lys Ala Ala Gly Leu Asp  
 180 185 190  
 Leu Gly Glu Val Cys Ser Arg Leu Val Asp Asp Val Ala Arg Asn His  
 195 200 205  
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<210> 1351  
 <211> 398  
 <212> DNA  
 <213> Homo sapiens

<400> 1351  
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 gaccacattc acttccagta caacgggttc ctaattcgcg ggccccttta tcgtttgggg  
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 atgctcccga gcatgccgac gtccgcacgc acggggagcg cggcgatcga tcgcaccatc  
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398

<210> 1352  
<211> 70  
<212> PRT  
<213> Homo sapiens

<400> 1352  
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20 25 30  
Leu His Pro Gly Leu Leu Ile Val Asp His Ile His Phe Gln Tyr Asn  
35 40 45  
Gly Phe Leu Ile Arg Gly Pro Leu Tyr Arg Leu Gly Ala Arg Thr Asp  
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Ala Ser Ala Leu Phe Leu  
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<210> 1353  
<211> 480  
<212> DNA  
<213> Homo sapiens

<400> 1353  
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240  
gagttccgag atgatatcaa gcgtctgtat cgccaggctg ggggtggagct caagaccacg  
300  
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360  
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<210> 1354  
<211> 160  
<212> PRT  
<213> Homo sapiens

<400> 1354  
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Ser Gln Leu Ile Thr Leu Thr Pro Thr Pro Pro Val Thr Arg Ile  
20 25 30  
Val Arg Gly Ile Gly Gln Pro Arg Gly Asn Met Leu Leu Val Gly Ile

		35					40					45				
Gly	Gly	Ser	Gly	Arg	Gln	Ser	Leu	Ala	Arg	Leu	Ala	Ser	Ser	Ile	Cys	
	50					55					60					
Asp	Tyr	Thr	Thr	Phe	Gln	Ile	Glu	Val	Thr	Lys	His	Tyr	Arg	Lys	Gln	
65					70					75					80	
Glu	Phe	Arg	Asp	Asp	Ile	Lys	Arg	Leu	Tyr	Arg	Gln	Ala	Gly	Val	Glu	
				85					90					95		
Leu	Lys	Thr	Thr	Ser	Phe	Ile	Phe	Val	Asp	Thr	Gln	Ile	Ala	Asp	Glu	
			100					105					110			
Ser	Phe	Leu	Glu	Asp	Ile	Asn	Asn	Ile	Leu	Ser	Ser	Gly	Glu	Val	Pro	
		115					120					125				
His	Leu	Phe	Arg	Pro	Asp	Glu	Phe	Glu	Glu	Ile	Gln	Ser	His	Ile	Ile	
	130					135					140					
Asp	Gln	Ala	Arg	Val	Glu	Gln	Val	Pro	Glu	Ser	Ser	Asp	Ser	Leu	Phe	
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<210> 1355
<211> 1063
<212> DNA
<213> Homo sapiens
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120					
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180					
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240					
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300					
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360					
gatccccct	cctgtgtacc	ccacaggctg	cagtgcacct	gccagcaca	caacctgcgg
420					
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480					
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660					
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720					
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780					
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<210> 1356  
 <211> 244  
 <212> PRT  
 <213> Homo sapiens

<400> 1356  
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 35 40 45  
 Thr Ala Asn Ser Ala Asn Glu Cys Gln Ser Cys Asn Cys Tyr Gly His  
 50 55 60  
 Ala Thr Asp Cys Tyr Tyr Asp Pro Glu Val Asp Arg Arg Arg Ala Ser  
 65 70 75 80  
 Gln Ser Leu Asp Gly Thr Tyr Gln Gly Gly Gly Val Cys Ile Asp Cys  
 85 90 95  
 Gln His His Thr Ala Gly Val Asn Cys Glu Arg Cys Leu Pro Gly Phe  
 100 105 110  
 Tyr Arg Ser Pro Asn His Pro Leu Asp Ser Pro His Val Cys Arg Arg  
 115 120 125  
 Cys Asn Cys Glu Ser Asp Phe Thr Asp Gly Thr Cys Glu Asp Leu Thr  
 130 135 140  
 Gly Arg Cys Tyr Cys Arg Pro Asn Phe Ser Gly Glu Arg Cys Asp Val  
 145 150 155 160  
 Cys Ala Glu Gly Phe Thr Gly Phe Pro Ser Cys Tyr Pro Thr Pro Ser  
 165 170 175  
 Ser Ser Asn Asp Thr Arg Glu Gln Val Leu Pro Ala Gly Gln Ile Val  
 180 185 190  
 Asn Cys Asp Cys Ser Ala Ala Gly Thr Gln Gly Asn Ala Cys Arg Lys  
 195 200 205  
 Asp Pro Arg Val Gly Arg Cys Phe Ala Asn Pro Asn Phe Gln Gly Thr  
 210 215 220  
 His Cys Glu Leu Cys Ala Pro Gly Phe Tyr Gly Pro Gly Cys Pro Gly  
 225 230 235 240  
 Ser Leu His Ala

<210> 1357  
 <211> 663  
 <212> DNA  
 <213> Homo sapiens

<400> 1357  
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 120

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ctg
663

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&lt;210&gt; 1358

&lt;211&gt; 221

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1358

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      20             25             30
Cys Gly Phe Gly Thr Glu Val Glu Phe Asn Thr Pro Val Leu Pro Val
      35             40             45
Gly Gly Val Arg Pro Val Ile Leu Gln Arg Pro Gly Trp Cys Pro Gly
      50             55             60
Val Phe Val Gly Leu Pro Asn His His Leu Asp Gly Val Ala Met Trp
      65             70             75             80
Cys Glu Leu Leu Ala Ala Val Phe Cys Ala Arg Ala Cys Leu Ala Trp
      85             90             95
Leu Gln Glu Ser Leu Ala His Arg Ala Ser Ala Ser Val Lys Ser Gln
      100            105            110
Leu Arg Arg Asp Ile Leu Gln Ala Arg Leu Ser Arg Pro Thr Asp Ala
      115            120            125
Thr Met Pro Ser Arg Thr Leu Ile Ser Leu Met Thr Thr Gly Leu Asp
      130            135            140
Ala Leu Asp Gly Tyr Tyr Ser Lys Tyr Leu Pro Gln Leu Val Leu Ala
      145            150            155            160
Val Ile Val Pro Ala Val Leu Ala Thr Ala Ile Gly Leu Asn Asp Leu
      165            170            175
Thr Ser Leu Val Ile Val Val Val Thr Ile Pro Leu Ile Pro Val Phe
      180            185            190
Met Ala Leu Ile Gly Trp Arg Thr Glu Ala Ala Val Ala Lys Arg Phe
      195            200            205
Lys Val Ala Thr Arg Leu Ala Asn His Phe Ala Asp Leu

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210 215 220

<210> 1359  
 <211> 423  
 <212> DNA  
 <213> Homo sapiens

<400> 1359  
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 420  
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 423

<210> 1360  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 1360  
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 Asp Val Phe Tyr Pro Leu Trp Glu Asp Asp Tyr Val Val Ala Met Pro  
 35 40 45  
 Val Gly Tyr Trp Leu Ala Asp Tyr Thr Ser Leu Ser Ile Lys Gln Ile  
 50 55 60  
 Asp Lys Gln Pro Phe Val Ser Arg Thr Pro Cys Asp Ile Leu Glu Ser  
 65 70 75 80  
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 Gln Val Lys Thr Glu Glu Tyr Ala  
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<210> 1361  
 <211> 5300  
 <212> DNA  
 <213> Homo sapiens

<400> 1361  
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 <211> 1587  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Gln Ala Ser His Thr Cys Gly Ser Pro Pro Glu Asp Phe Cys Pro His  
 50 55 60  
 Val Gly Ala Ala Gly Ala Gly Ala His Cys Gln Arg Cys Asp Ala Ala  
 65 70 75 80  
 Asp Pro Gln Arg His His Asn Ala Ser Tyr Leu Thr Asp Phe His Ser  
 85 90 95  
 Gln Asp Glu Ser Thr Trp Trp Gln Ser Pro Ser Met Ala Phe Gly Val  
 100 105 110  
 Gln Tyr Pro Thr Ser Val Asn Ile Thr Leu Arg Leu Gly Lys Ala Tyr  
 115 120 125  
 Glu Ile Thr Tyr Val Arg Leu Lys Phe His Thr Ser Arg Pro Glu Ser  
 130 135 140  
 Phe Ala Ile Tyr Lys Arg Ser Arg Ala Asp Gly Pro Trp Glu Pro Tyr  
 145 150 155 160  
 Gln Phe Tyr Ser Ala Ser Cys Gln Lys Thr Tyr Gly Arg Pro Glu Gly  
 165 170 175  
 Gln Tyr Leu Arg Pro Gly Glu Asp Glu Arg Val Ala Phe Cys Thr Ser  
 180 185 190  
 Glu Phe Ser Asp Ile Ser Pro Leu Ser Gly Gly Asn Val Ala Phe Ser  
 195 200 205  
 Thr Leu Glu Gly Arg Pro Ser Ala Tyr Asn Phe Glu Glu Ser Pro Gly  
 210 215 220  
 Leu Gln Glu Trp Val Thr Ser Thr Glu Leu Leu Ile Ser Leu Asp Arg  
 225 230 235 240  
 Leu Asn Thr Phe Gly Asp Asp Ile Phe Lys Asp Pro Lys Val Leu Gln  
 245 250 255  
 Ser Tyr Tyr Tyr Ala Val Ser Asp Phe Ser Val Gly Gly Arg Cys Lys

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Cys	Asn	Gly	His	Ala	Ser	Glu	Cys	Gly	Pro	Asp	Val	Ala	Gly	Gln	Leu		
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Ala	Cys	Arg	Cys	Gln	His	Asn	Thr	Thr	Gly	Thr	Asp	Cys	Glu	Arg	Cys		
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Leu	Pro	Phe	Phe	Gln	Asp	Arg	Pro	Trp	Ala	Arg	Gly	Thr	Ala	Glu	Ala		
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Ala	His	Glu	Cys	Leu	Pro	Cys	Asn	Cys	Ser	Gly	Arg	Ser	Glu	Glu	Cys		
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Thr	Phe	Asp	Arg	Glu	Leu	Phe	Arg	Ser	Thr	Gly	His	Gly	Gly	Arg	Cys		
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His	His	Cys	Arg	Asp	His	Thr	Ala	Gly	Pro	His	Cys	Glu	Arg	Cys	Gln		
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Glu	Asn	Phe	Tyr	His	Trp	Asp	Pro	Arg	Met	Pro	Cys	Gln	Pro	Cys	Asp		
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Cys	Gln	Ser	Ala	Gly	Ser	Leu	His	Leu	Gln	Cys	Asp	Asp	Thr	Gly	Thr		
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Cys	Ala	Cys	Lys	Pro	Thr	Val	Thr	Gly	Trp	Lys	Cys	Asp	Arg	Cys	Leu		
			405				410							415			
Pro	Gly	Phe	His	Ser	Leu	Ser	Glu	Gly	Gly	Cys	Arg	Pro	Cys	Thr	Cys		
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Asn	Pro	Ala	Gly	Ser	Leu	Asp	Thr	Cys	Asp	Pro	Arg	Ser	Gly	Arg	Cys		
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Pro	Cys	Lys	Glu	Asn	Val	Glu	Gly	Asn	Leu	Cys	Asp	Arg	Cys	Arg	Pro		
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Gly	Thr	Phe	Asn	Leu	Gln	Pro	His	Asn	Pro	Ala	Gly	Cys	Ser	Ser	Cys		
465				470					475						480		
Phe	Cys	Tyr	Gly	His	Ser	Lys	Val	Cys	Ala	Ser	Thr	Ala	Gln	Phe	Gln		
			485				490							495			
Val	His	His	Ile	Leu	Ser	Asp	Phe	His	Gln	Gly	Ala	Glu	Gly	Trp	Trp		
			500				505						510				
Ala	Arg	Ser	Val	Gly	Gly	Ser	Glu	His	Ser	Pro	Gln	Trp	Ser	Pro	Asn		
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Gly	Val	Leu	Leu	Ser	Pro	Glu	Asp	Glu	Glu	Glu	Leu	Thr	Ala	Pro	Gly		
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Lys	Phe	Leu	Gly	Asp	Gln	Arg	Phe	Ser	Tyr	Gly	Gln	Pro	Leu	Ile	Leu		
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Thr	Phe	Arg	Val	Pro	Pro	Gly	Asp	Ser	Pro	Leu	Pro	Val	Gln	Leu	Arg		
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Leu	Glu	Gly	Thr	Gly	Leu	Ala	Leu	Ser	Leu	Arg	His	Ser	Ser	Leu	Ser		
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Gly	Pro	Gln	Asp	Ala	Arg	Ala	Ser	Gln	Gly	Gly	Arg	Ala	Gln	Val	Pro		
	595					600						605					
Leu	Gln	Glu	Thr	Ser	Glu	Asp	Val	Ala	Pro	Pro	Leu	Pro	Pro	Phe	His		
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625				630					635						640		
Pro	Gly	Pro	Ser	Pro	Ala	Gly	Pro	Val	Phe	Leu	Thr	Glu	Val	Arg	Leu		
			645				650							655			
Thr	Ser	Ala	Arg	Pro	Gly	Leu	Ser	Pro	Pro	Ala	Ser	Trp	Val	Glu	Ile		
		660				665						670					
Cys	Ser	Cys	Pro	Thr	Gly	Tyr	Thr	Gly	Gln	Phe	Cys	Glu	Ser	Cys	Ala		
	675				680						685						
Pro	Gly	Tyr	Lys	Arg	Glu	Met	Pro	Gln	Gly	Gly	Pro	Tyr	Ala	Ser	Cys		

690	695	700
Val Pro Cys Thr Cys Asn Gln His Gly Thr Cys Asp Pro Asn Thr Gly		
705	710	715
Ile Cys Val Cys Ser His His Thr Glu Gly Pro Ser Cys Glu Arg Cys		720
	725	730
Leu Pro Gly Phe Tyr Gly Asn Pro Phe Ala Gly Gln Ala Asp Asp Cys		735
	740	745
Gln Pro Cys Pro Cys Pro Gly Gln Ser Ala Cys Thr Thr Ile Pro Glu		750
	755	760
Ser Gly Glu Val Val Cys Thr His Cys Pro Pro Gly Gln Arg Gly Arg		765
	770	775
Arg Cys Glu Val Cys Asp Asp Gly Phe Phe Gly Asp Pro Leu Gly Leu		780
	785	790
Phe Gly His Pro Gln Pro Cys His Gln Cys Gln Cys Ser Gly Asn Val		795
	805	810
Asp Pro Asn Ala Val Gly Asn Cys Asp Pro Leu Ser Gly His Cys Leu		815
	820	825
Arg Cys Leu His Asn Thr Thr Gly Asp His Cys Glu His Cys Gln Glu		830
	835	840
Gly Phe Tyr Gly Ser Ala Leu Ala Pro Arg Pro Ala Asp Lys Cys Met		845
	850	855
Pro Cys Ser Cys His Pro Gln Gly Ser Val Ser Glu Gln Met Pro Cys		860
	865	870
Asp Pro Val Thr Gly Gln Cys Ser Cys Leu Pro His Val Thr Ala Arg		875
	885	890
Asp Cys Ser Arg Cys Tyr Pro Gly Phe Phe Asp Leu Gln Pro Gly Arg		895
	900	905
Gly Cys Arg Ser Cys Lys Cys His Pro Leu Gly Ser Gln Glu Asp Gln		910
	915	920
Cys His Pro Lys Thr Gly Gln Cys Thr Cys Arg Pro Gly Val Thr Gly		925
	930	935
Gln Ala Cys Asp Arg Cys Gln Leu Gly Phe Phe Gly Ser Ser Ile Lys		940
	945	950
Gly Cys Arg Ala Cys Arg Cys Ser Pro Leu Gly Ala Ala Ser Ala Gln		955
	965	970
Cys His Tyr Asn Gly Thr Cys Val Cys Arg Pro Gly Phe Glu Gly Tyr		975
	980	985
Lys Cys Asp Arg Cys His Tyr Asn Phe Phe Leu Thr Ala Asp Gly Thr		990
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His Cys Gln Gln Cys Pro Ser Cys Tyr Ala Leu Val Lys Glu Glu Thr		1005
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Ala Lys Leu Lys Ala Arg Leu Thr Leu Thr Glu Gly Trp Leu Gln Gly		1020
	1025	1030
Ser Asp Cys Gly Ser Pro Trp Gly Pro Leu Asp Ile Leu Leu Gly Glu		1035
	1045	1050
Ala Pro Arg Gly Asp Val Tyr Gln Gly His His Leu Leu Pro Gly Ala		1055
	1060	1065
Arg Glu Ala Phe Leu Glu Gln Met Met Gly Leu Glu Gly Ala Val Lys		1070
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Ala Ala Arg Glu Gln Leu Gln Arg Leu Asn Lys Gly Ala Arg Cys Ala		1085
	1090	1095
Gln Ala Gly Ser Gln Lys Thr Cys Thr Gln Leu Ala Asp Leu Glu Ala		1100
	1105	1110
Val Leu Glu Ser Ser Glu Glu Glu Ile Leu His Ala Ala Ala Ile Leu		1115
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Ala Ser Leu Glu Ile Pro Gln Glu Gly		Pro Ser Gln Pro Thr Lys Trp			
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Ser His Leu Ala Ile Glu Ala Arg Ala Leu Ala Arg		Ser His Arg Asp			
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Thr Ala Thr Lys Ile Ala Ala Thr Ala Trp Arg Ala Leu Leu Ala Ser					
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Asn Thr Ser Tyr Ala Leu Leu Trp Asn Leu Leu Glu Gly Arg Val Ala					
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Leu Glu Thr Gln Arg Asp Leu Glu Asp Arg Tyr Gln Glu Val Gln Ala					
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Ala Gln Lys Ala Leu Arg Thr Ala Val Ala Glu Val Leu Pro Glu Ala					
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Glu Ser Val Leu Ala Thr Val Arg Gln Val Gly Ala Asp Thr Ala Pro					
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Tyr Leu Ala Leu Leu Ala Ser Pro Gly Ala Leu Pro Gln Lys Ser Arg					
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Ala Glu Asp Leu Gly Leu Lys Ala Lys Ala Leu Glu Lys Thr Val Ala					
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Ser Trp Gln His Met Ala Thr Glu Ala Ala Arg Thr Leu Gln Thr Ala					
	1285		1290		1295
Ala Gln Ala Thr Leu Arg Gln Thr Glu Pro Leu Thr Met Ala Arg Ser					
	1300		1305		1310
Arg Leu Thr Ala Thr Phe Ala Ser Gln Leu His Gln Glu Ala Arg Ala					
	1315		1320		1325
Ala Leu Thr Gln Ala Ser Ser Ser Val Gln Ala Ala Thr Val Thr Val					
	1330		1335		1340
Met Gly Ala Arg Thr Leu Leu Ala Asp Leu Glu Gly Met Lys Leu Gln					
1345		1350		1355	1360
Phe Pro Arg Pro Lys Asp Gln Ala Ala Leu Gln Arg Lys Ala Asp Ser					
	1365		1370		1375
Val Ser Asp Arg Leu Leu Ala Asp Thr Arg Lys Lys Thr Lys Gln Ala					
	1380		1385		1390
Glu Arg Met Leu Gly Asn Ala Ala Pro Leu Ser Ser Ser Ala Lys Lys					
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Lys Gly Arg Glu Ala Glu Val Leu Ala Lys Asp Ser Ala Lys Leu Ala					
	1410		1415		1420
Lys Ala Leu Leu Arg Glu Arg Lys Gln Ala His Arg Arg Ala Ser Arg					
1425		1430		1435	1440
Leu Thr Ser Gln Thr Gln Ala Thr Leu Gln Gln Ala Ser Gln Gln Val					
	1445		1450		1455
Leu Ala Ser Glu Ala Arg Arg Gln Glu Leu Glu Glu Ala Glu Arg Val					
	1460		1465		1470
Gly Ala Gly Leu Ser Glu Met Glu Gln Gln Ile Arg Glu Ser Arg Ile					
	1475		1480		1485
Ser Leu Glu Lys Asp Ile Glu Thr Leu Ser Glu Leu Leu Ala Arg Leu					
	1490		1495		1500
Gly Ser Leu Asp Thr His Gln Ala Pro Ala Gln Ala Leu Asn Glu Thr					
1505		1510		1515	1520
Gln Trp Ala Leu Glu Arg Leu Arg Leu Gln Leu Gly Ser Pro Gly Ser					
	1525		1530		1535
Leu Gln Arg Lys Leu Ser Leu Leu Glu Gln Glu Ser Gln Gln Gln Glu					
	1540		1545		1550
Leu Gln Ile Gln Gly Phe Glu Ser Asp Leu Ala Glu Ile Arg Ala Asp					

1555                      1560                      1565  
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 Ser Trp Gln  
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 <211> 392  
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 <213> Homo sapiens

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 ggaatctgcg aaaccgacaa agatgcggct gtttgagtgg atgtgaagga agatgcaggt  
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 240  
 cacacgacat gcacaacaaa taaatcgcaa agcacagagg gacaatcgaa tacaccttga  
 300  
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 360  
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<210> 1364  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

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 Val Lys Val Tyr Ser Ile Val Pro Leu Cys Phe Ala Ile Tyr Leu Leu  
 20                      25                      30  
 Cys Met Ser Cys Val Ser Ala Ser Pro Thr Gly His Gln Glu Gly Leu  
 35                      40                      45  
 Phe Met Val Ala Pro Pro Met Arg His Leu His Leu Pro Ser His Pro  
 50                      55                      60  
 Leu Lys Gln Pro His Leu Cys Arg Phe Arg Arg Phe Leu Leu Arg Leu  
 65                      70                      75                      80  
 Arg Ala Gln Arg Gly Phe Pro Leu Arg Pro Cys Leu Arg Trp Arg Leu  
 85                      90                      95  
 Arg Leu Gln Trp Arg Leu Tyr Pro  
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<210> 1365  
 <211> 451  
 <212> DNA  
 <213> Homo sapiens

<400> 1365

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 240  
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 300  
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 360  
 agagggaaag tcttggtcag cagcgaaatg ggcacagcc ggtcagcagt gctggtggtc  
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<210> 1366

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1366

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			20					25					30		
Pro	Trp	Asn	Glu	Val	Asp	Glu	Val	Trp	Pro	Asn	Val	Phe	Ile	Ala	Glu
		35				40						45			
Lys	Ser	Val	Ala	Val	Asn	Lys	Gly	Arg	Leu	Lys	Arg	Leu	Gly	Ile	Thr
	50				55					60					
His	Ile	Leu	Asn	Ala	Ala	His	Gly	Thr	Gly	Val	Tyr	Thr	Gly	Pro	Glu
65				70					75					80	
Phe	Tyr	Thr	Gly	Leu	Glu	Ile	Gln	Tyr	Leu	Gly	Val	Glu	Val	Asp	Asp
			85					90						95	
Phe	Pro	Glu	Val	Asp	Ile	Ser	Gln	His	Phe	Arg	Lys	Ala	Ser	Glu	Phe
		100					105					110			
Leu	Asp	Glu	Ala	Leu	Leu	Thr	Tyr	Arg	Gly	Lys	Val	Leu	Val	Ser	Ser
	115					120					125				
Glu	Met	Gly	Ile	Ser	Arg	Ser	Ala	Val	Leu	Val	Val	Ala	Tyr	Leu	Met
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<210> 1367

<211> 330

<212> DNA

<213> Homo sapiens

<400> 1367

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tcgtcgtcgc attgctgctg gtcacgtcgc cactgcccgt cagcgcactc gtcggccaga  
 180  
 gcttcttcga ccgcgaaggc gccttcgtcg gcctcgccaa ctctcgtcgc tacctcgaca  
 240  
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 tctgcaccgc catcgccctac gtctacgcgt  
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<210> 1368  
 <211> 82  
 <212> PRT  
 <213> Homo sapiens

<400> 1368  
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 35 40 45  
 Ala Thr Ser Thr Thr Pro Pro Trp Ser Ser Pro Pro Ser Thr Ala Ser  
 50 55 60  
 Gly Trp Pro Arg Ser Ala Pro Ser Ser Ala Pro Pro Ser Pro Thr Ser  
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 Thr Arg

<210> 1369  
 <211> 356  
 <212> DNA  
 <213> Homo sapiens

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 cccttgacc cctacagcca ggagcagcgg gagcagctgc aggtcctacg ccaggctgcc  
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 240  
 tgtgcccag agttccgcaa actgggcttt tctaacagca acccagcaca ggacctggag  
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 356

<210> 1370  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 1370  
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			20					25					30				
Gln	Glu	Gln	Arg	Glu	Gln	Leu	Gln	Val	Leu	Arg	Gln	Ala	Ala	Phe	Glu		
		35					40					45					
Val	Glu	Gly	Glu	Ser	Ser	Gly	Ala	Gly	Leu	Ser	Ala	Asp	Arg	Arg	Arg		
	50					55					60						
Ser	Leu	Cys	Ala	Arg	Glu	Phe	Arg	Lys	Leu	Gly	Phe	Ser	Asn	Ser	Asn		
65				70						75				80			
Pro	Ala	Gln	Asp	Leu	Glu	Arg	Val	Pro	Pro	Gly	Leu	Leu	Ala	Leu	Asp		
			85					90					95				
Asn	Met	Leu	Tyr	Phe	Ser	Arg	Asn										
			100														

&lt;210&gt; 1371

&lt;211&gt; 648

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1371

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60

tggtcagcgg ttggattagc cagttctgca gactggctca caccagacc atctggaccg  
120

cttatagaga agacatgttc caagtaccct ctttcctttg tctgcttttc tcatgggtac  
180

tttgccctct aagaagccta ctttcctctt ttctctcct cctctcccta tttctctttg  
240

ttgagagagc agtcagatta acccaacaac tcttgaggagtg ccttggtcac ctgagagcat  
300

ggaaagtcca tgccctcacc agagtaatga ctaccatttc tccaaaactc tctcatgcc  
360

atccgatagg cagtattgat cagaagggga aatctagtgt gttaaaattg ataaaccagc  
420

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648

&lt;210&gt; 1372

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1372

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1 5 10 15

Cys Pro Leu Arg Ser Leu Leu Ser Ser Phe Pro Leu Leu Ser Leu

20 25 30

Phe Leu Phe Val Glu Arg Ala Val Arg Leu Thr Gln Gln Leu Leu Glu



```

          35          40          45
Cys Leu Gly His Leu Arg Ala Trp Lys Val His Ala Leu Thr Arg Val
          50          55          60
Met Thr Thr Ile Ser Pro Lys Leu Ser Ser Cys His Pro Ile Gly Ser
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Ile Asp Gln Lys Gly Lys Ser Ser Val Leu Lys Leu Ile Asn Gln Leu
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Lys Leu Tyr Leu Gln
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 <211> 369  
 <212> DNA  
 <213> Homo sapiens

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180
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 <213> Homo sapiens

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Glu Leu Phe Val Arg Cys Thr Thr Glu Asn Leu Ala Asp Gln Asn Pro
          35          40          45
Arg Leu Arg Ser Met Cys Val Pro Gly Arg Asp Thr Ser Cys Trp Arg
          50          55          60
Arg Lys Pro Ser Val Tyr Leu Glu Ala Lys Gly Phe Leu Asn Arg Gly
65          70          75          80
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&lt;213&gt; Homo sapiens

&lt;400&gt; 1375

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 282

&lt;210&gt; 1376

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1376

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			20					25				30			
Ala	Ile	Val	Gly	Gly	Ala	Ile	Ala	Leu	Val	Ala	Gln	Ser	Phe	Met	Ser
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&lt;210&gt; 1377

&lt;211&gt; 6306

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1377

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&lt;210&gt; 1378

&lt;211&gt; 798

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1378

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Lys	Ser	His	Thr	Gln	Ser	Gln	Ser	Gln	His	Leu	Gln	Ala	Lys	Pro	Thr	
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			260					265					270			
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&lt;210&gt; 1379

&lt;211&gt; 590

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1379

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<210> 1380  
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 <213> Homo sapiens

<400> 1380  
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 20 25 30  
 Cys Pro Cys Arg Val Ala Ala Ser Pro Ile Ser Ala Leu Gly Val Pro  
 35 40 45  
 Ala Leu Trp Pro Arg His Pro Ser Leu Pro Ser Glu Ser Leu Pro Cys  
 50 55 60  
 Gly Arg Val Xaa Pro Ser Leu Pro Ser Glu Ser Leu Pro Cys Gly Arg  
 65 70 75 80  
 Val Xaa Pro Pro Leu Pro Ser Val Ser Leu Pro Cys Gly Arg Val Xaa  
 85 90 95  
 Pro Pro Leu Pro Ser Val Ser Leu Pro Cys Gly Arg Val Xaa Pro Pro  
 100 105 110  
 Leu Pro Ser Val Ser Pro Pro Cys Gly Arg Val Xaa Pro Ser Leu Pro  
 115 120 125  
 Ser Val Ser Pro Pro Cys Gly Arg Val Thr His Leu Cys  
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<210> 1381  
 <211> 433  
 <212> DNA  
 <213> Homo sapiens

<400> 1381  
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<210> 1382

<211> 123  
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 <213> Homo sapiens

<400> 1382  
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           20                  25                  30  
 Gly Arg Ser Thr Leu Thr Ala Leu Ala Lys His Ser Phe Pro Cys Pro  
           35                  40                  45  
 Gly Cys His Gln Arg Gly Gly Arg Ser His Arg Ser Ala Leu Val Ser  
           50                  55                  60  
 Ala Gly Leu Lys Trp Gly Phe Ser Phe Cys Val Glu Gln Phe Ile Arg  
 65                  70                  75                  80  
 Gly Leu Ile Ser Lys Pro Arg His Trp Pro Cys Thr Cys Ser Ser Arg  
                   85                  90                  95  
 Lys Pro Asn Ser Cys Leu Trp Ala Pro Ala Tyr Arg Gln Pro Asn Gly  
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<210> 1383  
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 <213> Homo sapiens

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<210> 1384  
 <211> 97  
 <212> PRT  
 <213> Homo sapiens

<400> 1384  
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 35 40 45  
 Thr Ala Ser Ser Leu Leu Pro Leu Thr Asn Thr Pro Gln Thr Pro His  
 50 55 60  
 Met Ser Ser Pro Thr Pro Pro Arg Ala Met Val Leu Thr Lys Gln Arg  
 65 70 75 80  
 Pro Ser Gln Thr Gln Ser Cys Gly Pro Arg Val Ser Arg Arg Ala Asp  
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 Asn

<210> 1385  
 <211> 210  
 <212> DNA  
 <213> Homo sapiens

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 gtggcgtgta tgcattggtg gtgcacgtgt gcactgtgtg tgggggtgtat gncatggtgg  
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<210> 1386  
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 <212> PRT  
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<400> 1386  
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 20 25 30  
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521

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<210> 1388  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

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<400> 1388
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20     25     30
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35     40     45
Ala Ala Asp Gly Ser Ser Asp Ser Thr Ala Gly Asp Gly Gly Lys Glu
50     55     60
Ser Glu Asp Glu Asp Ser Asp Arg Gly Gly Glu His Arg Cys Ser Phe
65     70     75     80
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85     90     95
Ala Ala Phe Ser Gly His Pro
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<210> 1389  
 <211> 4013

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1389

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4013

&lt;210&gt; 1390

&lt;211&gt; 1156

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1390

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Thr	Ile	Ile	Ser	Thr	Ile	Pro	Ser	Thr	Ala	Met	His	Thr	Arg	Ser	Thr
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Ala	Ala	Pro	Ile	Pro	Ile	Leu	Pro	Glu	Arg	Gly	Val	Ser	Leu	Phe	Pro
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Tyr	Gly	Ala	Asp	Ala	Gly	Asp	Leu	Glu	Phe	Val	Arg	Arg	Thr	Val	Asp
65					70				75					80	
Phe	Thr	Ser	Pro	Leu	Phe	Lys	Pro	Ala	Thr	Gly	Phe	Pro	Leu	Gly	Ser
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Ser	Leu	Arg	Asp	Ser	Leu	Tyr	Phe	Thr	Asp	Asn	Gly	Gln	Ile	Ile	Phe
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Pro	Glu	Ser	Asp	Tyr	Gln	Ile	Phe	Ser	Tyr	Pro	Asn	Pro	Leu	Pro	Thr
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Gly	Phe	Thr	Gly	Arg	Asp	Pro	Val	Ala	Leu	Val	Ala	Pro	Phe	Trp	Asp

1184



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Thr	Glu	Gly	Leu	Leu	Gly	Val	Trp	Asn	Asn	Asn	Pro	Glu	Asp	Asp	Phe		
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Arg	Met	Pro	Asn	Gly	Ser	Thr	Ile	Pro	Pro	Gly	Ser	Pro	Glu	Glu	Met		
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Leu	Phe	His	Phe	Gly	Met	Thr	Trp	Gln	Ile	Asn	Gly	Thr	Gly	Leu	Leu		
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Ala	Asn	Ala	Thr	Leu	Asn	Gln	Tyr	Pro	Pro	Ser	Ile	Asn	Gly	Gly	Arg		
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			725					730						735			
Glu	Leu	Phe	Glu	Asn	Gly	Thr	Leu	Leu	Trp	Thr	Pro	Lys	Ser	Leu	Glu		
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Pro	Phe	Thr	Leu	Glu	Ile	Leu	Ala	Arg	Ser	Ala	Lys	Ile	Gly	Leu	Ala		
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785				790						795					800		
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Gln	Thr	Leu	Gly	Cys	Gln	Pro	Met	Cys	Thr	Cys	Pro	Pro	Ala	Phe	Thr		
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Leu	Glu	Leu	Pro	Leu	Arg	Val	Ile	Gln	Leu	Leu	Leu	Ser	Glu	Glu	Glu		
	915						920					925					
Asn	Ala	Ser	Met	Ala	Glu	Val	Asn	Ala	Ser	Val	Ala	Tyr	Arg	Leu	Gly		
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Ile	Ser	Glu	Phe	Gln	Tyr	Arg	Pro	Arg	Gly	Pro	Val	Ile	Asp	Phe	Leu		
		980						985					990				
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995	1000	1005
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1010	1015	1020
Ser Gly Glu Asp Val Arg Asp	Val Thr Ala Leu Asn Val	Ser Thr Leu
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Lys Ala Tyr Phe Arg Cys Asp	Gly Tyr Lys Gly Tyr Asp	Leu Val Tyr
1045	1050	1055
Ser Pro Gln Ser Gly Phe Thr Cys	Val Ser Pro Cys Ser Arg	Gly Tyr
1060	1065	1070
Cys Asp His Gly Gly Gln Cys Gln	His Leu Pro Ser Gly	Pro Arg Cys
1075	1080	1085
Ser Cys Val Ser Phe Ser Ile Tyr	Thr Ala Trp Gly Glu	His Cys Glu
1090	1095	1100
His Leu Ser Met Lys Leu Asp Ala	Phe Phe Gly Ile Phe Phe	Gly Ala
1105	1110	1115
Leu Gly Gly Leu Leu Leu Leu Gly	Val Gly Thr Phe Val Val	Leu Arg
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<210> 1391  
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 <212> DNA  
 <213> Homo sapiens

<400> 1391  
 gtcgacggca tgcaggtcca tgacaaggca accgacctca accgcctgcg ccagaagatc  
 60  
 ggcattgtgt tccagcagtg gaacgccttc ccgcacctca ccgtgctgga aaacgtgatg  
 120  
 ctggcgccgc gcaaggtgct cggtaaaagc aagcagaagg ccgaggagct ggcgggtccgg  
 180  
 caactgaccc acgtgggcct gagcgacaag ctcaagacct ttcccgcan gctttccggc  
 240  
 ggccagcaac agcgcattggc gattgcccgg gccctggcca tgcgcgcgga ctacatgctg  
 300  
 ttcgacgaag ccacctcggc ccttgatccg cagttggtgg gcgaggtgct ggacaccatg  
 360  
 cgcattgctg ccgaagacgg catgaccatg gtccctggtga cccatgaaat ccgctttgcc  
 420  
 cgcgatgtgt ccgatcgctt ggcgtttcttt cgcaacggcc tgggtgcacga gatcggcgcg  
 480  
 c  
 481

<210> 1392  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 1392  
 Val Asp Gly Ile Glu Val His Asp Lys Ala Thr Asp Leu Asn Arg Leu

1				5					10					15			
Arg	Gln	Lys	Ile	Gly	Ile	Val	Phe	Gln	Gln	Trp	Asn	Ala	Phe	Pro	His		
			20					25					30				
Leu	Thr	Val	Leu	Glu	Asn	Val	Met	Leu	Ala	Pro	Arg	Lys	Val	Leu	Gly		
		35					40					45					
Lys	Ser	Lys	Gln	Lys	Ala	Glu	Glu	Leu	Ala	Val	Arg	Gln	Leu	Thr	His		
	50					55					60						
Val	Gly	Leu	Ser	Asp	Lys	Leu	Lys	Thr	Phe	Pro	Ala	Xaa	Leu	Ser	Gly		
65					70				75						80		
Gly	Gln	Gln	Gln	Arg	Met	Ala	Ile	Ala	Arg	Ala	Leu	Ala	Met	Ser	Pro		
				85				90					95				
Asp	Tyr	Met	Leu	Phe	Asp	Glu	Ala	Thr	Ser	Ala	Leu	Asp	Pro	Gln	Leu		
		100						105					110				
Val	Gly	Glu	Val	Leu	Asp	Thr	Met	Arg	Met	Leu	Ala	Glu	Asp	Gly	Met		
	115					120						125					
Thr	Met	Val	Leu	Val	Thr	His	Glu	Ile	Arg	Phe	Ala	Arg	Asp	Val	Ser		
	130				135						140						
Asp	Arg	Val	Ala	Phe	Phe	Arg	Asn	Gly	Leu	Val	His	Glu	Ile	Gly	Ala		
145					150				155						160		

&lt;210&gt; 1393

&lt;211&gt; 309

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1393

cggccgccat cggcgcgggc cttgtgggat atggccatta ctgagggtgct ggccggctac  
 60  
 tacgaacccg acgaacacgg acaccgcaag cccgagtcgt tgtacggcgc ggtcaagatg  
 120  
 tgggcccttc tgcgccgtca gggcatcagg tggcccgctg cancggtgga gcgcctcatg  
 180  
 cgggacaacc ggtggcgtgg ggtgaccgc cgtaagaagg ttncgcacca ccatcgctga  
 240  
 cccggctgcc gggcgagccc cggatctggt ggaccgccag ttccgcgtcg aggcgcccac  
 300  
 caagttgct  
 309

&lt;210&gt; 1394

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1394

Arg	Pro	Pro	Ser	Ala	Arg	Ala	Leu	Trp	Asp	Met	Ala	Ile	Thr	Glu	Val		
1				5				10					15				
Leu	Ala	Gly	Tyr	Tyr	Glu	Pro	Asp	Glu	His	Gly	His	Arg	Lys	Pro	Glu		
		20					25					30					
Ser	Leu	Tyr	Gly	Ala	Val	Lys	Met	Trp	Ala	Leu	Leu	Arg	Arg	Gln	Gly		
	35					40					45						
Ile	Arg	Trp	Pro	Ala	Ala	Xaa	Val	Glu	Arg	Leu	Met	Arg	Asp	Asn	Arg		
	50				55				60								
Trp	Arg	Gly	Val	Thr	Arg	Arg	Lys	Lys	Val	Xaa	His	His	His	Arg			

65

70

75

&lt;210&gt; 1395

&lt;211&gt; 347

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1395

```

accggtgggg ttcgtggtgg cctgggttact ttttggcgcg agcgggtgtgg tgtggggccgt
60
tatgacggta gtcgtgggcg aaacggtgct tgctggttg cgccgtcaac gtcgaagagc
120
ccagattctt aaaggcggtc gcgatgttgc ccgggcgaca agggccttgg ctggacgggt
180
gtcggtgggg gagatccctt cagttgcact agagcacgtg gccgatgacg tggaggtatt
240
ggctcaggct aggcgggctc atgcagtggg cggaagcggt tccgacgccc tcattgccac
300
ctcccggcaa ccagggatgg ctggtctggt gccactagcc cacgcgt
347

```

&lt;210&gt; 1396

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1396

```

Met Thr Val Val Val Gly Glu Thr Val Leu Val Val Val Arg Arg Gln
1           5           10           15
Arg Arg Arg Ala Gln Ile Leu Lys Gly Gly Arg Asp Val Ala Arg Ala
20           25           30
Thr Arg Ala Leu Ala Gly Arg Val Ser Val Gly Glu Ile Pro Ser Val
35           40           45
Ala Leu Glu His Val Ala Asp Asp Val Glu Val Leu Ala Gln Ala Arg
50           55           60
Arg Ala His Ala Val Gly Gly Ser Val Ser Asp Ala Leu Ile Ala Thr
65           70           75           80
Ser Arg Gln Pro Gly Met Ala Gly Leu Val Pro Leu Ala His Ala
85           90           95

```

&lt;210&gt; 1397

&lt;211&gt; 308

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1397

```

caattgcgcg gggttactgca ggccaagatg cagatgatgt cggacaccaa tttcctcgac
60
ctggccccgcg tcgcgattgc cgccactatc cattctccgg aacgcgcgca agacatggtc
120
aaccgcttga gcaaacgcga agaaggcttc acgcaatggg tacgtgccgc acaggacgat
180
ggtcgactgt cctgcagcga cccggcggtc gctgcccacc agatacaaag cctgctcaag
240

```

gcgttcgcct tttggccgca aatcaccctg ggccagccgg tgctggatgc cgccagccag  
 300  
 gccaacgt  
 308

<210> 1398  
 <211> 93  
 <212> PRT  
 <213> Homo sapiens

<400> 1398  
 Met Gln Met Met Ser Asp Thr Asn Phe Leu Asp Leu Ala Arg Val Ala  
 1 5 10 15  
 Ile Ala Ala Thr Ile His Ser Pro Glu Arg Ala Gln Asp Met Val Asn  
 20 25 30  
 Arg Leu Ser Lys Arg Glu Glu Gly Phe Thr Gln Trp Val Arg Ala Ala  
 35 40 45  
 Gln Asp Asp Gly Arg Leu Ser Cys Ser Asp Pro Ala Phe Ala Ala His  
 50 55 60  
 Gln Ile Gln Ser Leu Leu Lys Ala Phe Ala Phe Trp Pro Gln Ile Thr  
 65 70 75 80  
 Leu Gly Gln Pro Val Leu Asp Ala Ala Ser Gln Ala Asn  
 85 90

<210> 1399  
 <211> 539  
 <212> DNA  
 <213> Homo sapiens

<400> 1399  
 gctagctaac atttattttt gtttttatta ttgttatcta gtggtaaaaa tttcttaagc  
 60  
 aatgaactga agtctagatt tttgagatgt agtcctttac tgattataaa gcaaagtgcct  
 120  
 ttagatatatt taacttcac agtactatct gtagtaggag gctgatttta ctaaaattag  
 180  
 ataattatat acatctgttc ctattccttt ggtaggacct ttaagaaagt catgctgaat  
 240  
 ctgagaatgc caggacattt cacgtggtat gaatgtagga tattcattta cacatcgtc  
 300  
 cacagacagc ctctatataa cccaccctgt tgggggtattg aattttttct tttcccgccc  
 360  
 tacttttaaa tcttgtcatg taatttcaac acataatttg tggcacttta gtttttttac  
 420  
 cttttatagt ttaataactt atacatgtac atgcttaaaa tgtcaaacaa tacaaatggg  
 480  
 aacaaagaaa attgcttcac catctgtgaa cccctccttt tgtagtcccc ttcacgcgt  
 539

<210> 1400  
 <211> 90  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 1400

```

Met Asn Val Gly Tyr Ser Phe Thr His Arg Cys Thr Asp Ser Leu Tyr
 1             5             10             15
Ile Thr His Pro Val Gly Val Leu Asn Phe Phe Phe Ser Arg Pro Thr
             20             25             30
Phe Lys Ser Cys His Val Ile Ser Thr His Asn Leu Trp His Phe Ser
             35             40             45
Phe Phe Thr Leu Tyr Ser Leu Ile Thr Tyr Thr Cys Thr Cys Leu Lys
             50             55             60
Cys Gln Thr Ile Gln Met Gly Thr Lys Lys Ile Ala Ser Pro Ser Val
65             70             75             80
Asn Pro Ser Phe Cys Ser Pro Leu His Ala
             85             90

```

&lt;210&gt; 1401

&lt;211&gt; 653

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1401

```

ttcgaggggt cacttggtact caagcttcgc gaagtcgggg acctcggacg accgattttt
60
cggctgtgca ccgtcaccgc aaggctggcg tgggttnnct catcaccggc gggcgatgg
120
ncattgggggt ttgatggccg cgtttccctg ctgctggggc cgatcctcat cgtcaccggc
180
ccaacggtga ttaaccgat cctgcgtcag ttgcgtccta cccggcgagt gagtgtctcg
240
ttgaggtggg aaggaatcgt cgtcgatccg ctcggcgcca tcttggcatt actggtgtat
300
caggccataa ccagcatcga ccgatcttcc atcggacaag gcgtcttgaa tctggggctc
360
accctattgg tcgggctgct cttcgctggc cccatcgggt ggatcgtcac cgcgatgatg
420
aaacggcacc tcatcccgga cttcctacaa ggcgtgattt tcgttgggggt cgccgttgga
480
acgtgtgttg gcgctaactg cattcgggag gaatcgggccc tggtcgccgt tacgatgctc
540
ggcatctacc tggcgaacca gcgcaacctc gagcttgagc ccgtcatcga gttcaaggaa
600
cacctgcagg tgctcctcgt tggcgtccta ttcatcatgc ttgcaggacg cgt
653

```

&lt;210&gt; 1402

&lt;211&gt; 217

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1402

```

Phe Glu Gly Ser Leu Gly Leu Lys Leu Arg Glu Val Arg Asp Leu Gly
 1             5             10             15
Arg Pro Ile Phe Arg Leu Cys Thr Val Thr Ala Arg Leu Ala Trp Val
             20             25             30
Xaa Ser Ser Pro Ala Arg Arg Trp Xaa Leu Gly Phe Asp Gly Arg Val

```

		35					40					45				
Ser	Leu	Leu	Leu	Gly	Ala	Ile	Leu	Ile	Val	Thr	Gly	Pro	Thr	Val	Ile	
	50					55					60					
Asn	Pro	Ile	Leu	Arg	Gln	Leu	Arg	Pro	Thr	Arg	Arg	Val	Ser	Ala	Leu	
65					70					75					80	
Leu	Arg	Trp	Glu	Gly	Ile	Val	Val	Asp	Pro	Leu	Gly	Ala	Ile	Leu	Ala	
				85					90					95		
Leu	Leu	Val	Tyr	Gln	Ala	Ile	Thr	Ser	Ile	Asp	Arg	Ser	Ser	Ile	Gly	
			100					105					110			
Gln	Gly	Val	Leu	Asn	Leu	Gly	Leu	Thr	Leu	Leu	Val	Gly	Leu	Leu	Phe	
		115					120					125				
Ala	Gly	Pro	Ile	Gly	Trp	Ile	Val	Thr	Ala	Met	Met	Lys	Arg	His	Leu	
	130					135					140					
Ile	Pro	Asp	Phe	Leu	Gln	Gly	Val	Ile	Phe	Val	Gly	Val	Ala	Val	Gly	
145					150					155					160	
Thr	Cys	Val	Gly	Ala	Asn	Val	Ile	Arg	Glu	Glu	Ser	Gly	Leu	Val	Ala	
				165					170					175		
Val	Thr	Met	Leu	Gly	Ile	Tyr	Leu	Ala	Asn	Gln	Arg	Asn	Leu	Glu	Leu	
			180					185					190			
Glu	Pro	Val	Ile	Glu	Phe	Lys	Glu	His	Leu	Gln	Val	Leu	Leu	Val	Gly	
		195					200					205				
Val	Leu	Phe	Ile	Met	Leu	Ala	Gly	Arg								
	210					215										

```
<210> 1403
<211> 393
<212> DNA
<213> Homo sapiens
```

```

<400> 1403
aagcttttgca gtttcttgggt atccaaatcc aggcgttctt ggtctttttc cacaacagtg
60
tgtgccacat gaaatggaac acggggcaaac atatctgac caggaaacat tagccaagta
120
tgttccttgg ggtcatgac tccacaagtt gggcatatct cctttatcag ctgcttgcca
180
gagcttcctt ccatctcttt cattatgacc tcaaagggag atggcacgct agtcttggac
240
gtcctagctt gtttcogaag ggctgtcaga gcctccctgt taccatttct tatottatca
300
ttttccacca actgatgtct agccagaaga actttttctg catcagtctc aatatcaacc
360
agagcctctt gaagctgctt catgttgga tcc
393

```

```
<210> 1404
<211> 127
<212> PRT
<213> Homo sapiens
```

```

<400> 1404
Met Lys Gln Leu Gln Glu Ala Leu Val Asp Ile Glu Thr Asp Ala Glu
 1             5             10             15
Lys Val Leu Leu Ala Arg His Gln Leu Val Glu Asn Asp Lys Ile Arg

```

	20		25		30
Asn Gly	Asn Arg Glu Ala Leu Thr	Ala Leu Arg Lys	Gln Ala Arg Thr		
	35		40		45
Ser Lys Thr	Ser Val Pro Ser Pro Phe Glu Val	Ile Met Lys Glu Met			
	50		55		60
Glu Gly Ser	Ser Gly Lys Gln Leu Ile Lys Glu Ile Cys Pro Thr Cys				
65		70		75	80
Gly Asp His	Asp Pro Lys Glu His Thr Trp Leu Met Phe Pro Gly Ser				
	85		90		95
Asp Met Phe	Ala Arg Val Pro Phe His Val Ala His Thr Val Val Glu				
	100		105		110
Lys Asp Gln	Glu Arg Leu Asp Leu Asp Thr Lys Lys Leu Gln Ser				
	115		120		125

&lt;210&gt; 1405

&lt;211&gt; 421

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1405

```

nnccgactgc acaaggccct gggcatcgaa ctgcccggcg cactgcaggt catcgtcaaa
60
ggcgaaacca gcctgcaatg gctcggcccg gacgaatggc tgctgatcgt gccagcggg
120
gaagagtctc ccgccgagca aaacctgcgt gccgccctgg gcgagttgca tatccaggtc
180
gtcaacgtca gcggtggcca gcagatcctc gaactcagcg gcccgaaact gcgcgacgtg
240
ctgatgaaat ccaccagcta cgacgtacac cccaacaact tcccgggtggg caaggcgggtg
300
ggcacggtgt tcgccaagtc gcaactggtg atccgccata ccgccgaaga cacctgggaa
360
ctgctgatcc gtcgcagctt ctcggattac tgggtggctgt ggttgcagga cgcggtgca
420
t
421

```

&lt;210&gt; 1406

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1406

Xaa Arg	Leu His Lys Ala Leu Gly Ile Glu Leu Pro Gly Ala Leu Gln				
1		5	10	15	
Val Ile	Val Lys Gly Glu Thr Ser Leu Gln Trp Leu Gly Pro Asp Glu				
	20		25	30	
Trp Leu	Leu Ile Val Pro Ser Gly Glu Glu Phe Ala Ala Glu Gln Asn				
	35		40	45	
Leu Arg	Ala Ala Leu Gly Glu Leu His Ile Gln Val Val Asn Val Ser				
	50		55	60	
Gly Gly	Gln Gln Ile Leu Glu Leu Ser Gly Pro Asn Val Arg Asp Val				
65		70		75	80
Leu Met	Lys Ser Thr Ser Tyr Asp Val His Pro Asn Asn Phe Pro Val				



				85					90					95					
Gly	Lys	Ala	Val	Gly	Thr	Val	Phe	Ala	Lys	Ser	Gln	Leu	Val	Ile	Arg				
			100					105					110						
His	Thr	Ala	Glu	Asp	Thr	Trp	Glu	Leu	Leu	Ile	Arg	Arg	Ser	Phe	Ser				
		115					120					125							
Asp	Tyr	Trp	Trp	Leu	Trp	Leu	Gln	Asp	Ala	Ala	Ala								
	130					135					140								

<210> 1407  
 <211> 1006  
 <212> DNA  
 <213> Homo sapiens

<400> 1407  
 nncggccggg agaagctgga gctcgctcctg tctaacctgc aggcagacgt cctggagttg  
 60  
 ctgctggagt ttgtctacac gggctccctg gtcctcgact cggccaacgc caagacactg  
 120  
 ctggaggcgg ccagcaagtt ccagttccac accttctgca aagtctgcgt gtcctttctt  
 180  
 gagaagcagc tgacggccag caactgcctg ggcgttgctg ccatggccga ggccatgcag  
 240  
 tgcagcgagc tctaccacat ngccaaggcc ttgcgctgc agatcttccc cgagggtggc  
 300  
 gccaggagg agatcctcag catctccaag gacgacttca tcgcctacgt ctccaacgac  
 360  
 agcctcaaca ccaaggctga ggagctggtg tacgagacag tcatcaagtg gatcaagaag  
 420  
 gaccccgga cacgcacaca gtacgcggct gagctcctgg ccgtgggtccg cctccccctc  
 480  
 atccacccca gctacctgct caatgtggtt gacaatgaag agctgatcaa gtcctcagaa  
 540  
 gcctgccggg acctggtgaa cgaggccaaa cgctaccata tgctgcccca cgcccgccag  
 600  
 gagatgcaga cgccccgaac ccggccgcgc ctctctgcag gtgtgggtga ggtcatcgtc  
 660  
 ttggttgggg gccgtcagat ggtggggatg acccagcgct cgctgggtggc cgtcacctgc  
 720  
 tggaaccgc agaacaaca gtggtacccc ttggcctcgg tgcccttttt aggcccgga  
 780  
 ttcttcagt tagtgagtgc aggggccaac atctacctct cagggtgggat ggaatcaggg  
 840  
 gtgccgctgg ctgatgtctg gtgctacatg tccctgcttg ataactggaa cctcgtctcc  
 900  
 agaatgccag tccccgctg tcggccccat agcctcgtct acgatgggaa gatttacacc  
 960  
 ctcgggggac ttggcgtggc aggcaacgtg gaccacgtgg agagga  
 1006

<210> 1408  
 <211> 335  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 1408

```

Xaa Gly Arg Glu Lys Leu Glu Leu Val Leu Ser Asn Leu Gln Ala Asp
 1           5           10           15
Val Leu Glu Leu Leu Leu Glu Phe Val Tyr Thr Gly Ser Leu Val Ile
      20           25           30
Asp Ser Ala Asn Ala Lys Thr Leu Leu Glu Ala Ala Ser Lys Phe Gln
      35           40           45
Phe His Thr Phe Cys Lys Val Cys Val Ser Phe Leu Glu Lys Gln Leu
      50           55           60
Thr Ala Ser Asn Cys Leu Gly Val Ala Ala Met Ala Glu Ala Met Gln
65           70           75           80
Cys Ser Glu Leu Tyr His Xaa Ala Lys Ala Phe Ala Leu Gln Ile Phe
      85           90           95
Pro Glu Val Ala Ala Gln Glu Glu Ile Leu Ser Ile Ser Lys Asp Asp
      100          105          110
Phe Ile Ala Tyr Val Ser Asn Asp Ser Leu Asn Thr Lys Ala Glu Glu
      115          120          125
Leu Val Tyr Glu Thr Val Ile Lys Trp Ile Lys Lys Asp Pro Ala Thr
      130          135          140
Arg Thr Gln Tyr Ala Ala Glu Leu Leu Ala Val Val Arg Leu Pro Phe
145          150          155          160
Ile His Pro Ser Tyr Leu Leu Asn Val Val Asp Asn Glu Glu Leu Ile
      165          170          175
Lys Ser Ser Glu Ala Cys Arg Asp Leu Val Asn Glu Ala Lys Arg Tyr
      180          185          190
His Met Leu Pro His Ala Arg Gln Glu Met Gln Thr Pro Arg Thr Arg
      195          200          205
Pro Arg Leu Ser Ala Gly Val Ala Glu Val Ile Val Leu Val Gly Gly
      210          215          220
Arg Gln Met Val Gly Met Thr Gln Arg Ser Leu Val Ala Val Thr Cys
225          230          235          240
Trp Asn Pro Gln Asn Asn Lys Trp Tyr Pro Leu Ala Ser Val Pro Phe
      245          250          255
Leu Gly Pro Gly Phe Phe Ser Val Val Ser Ala Gly Ala Asn Ile Tyr
      260          265          270
Leu Ser Gly Gly Met Glu Ser Gly Val Pro Leu Ala Asp Val Trp Cys
      275          280          285
Tyr Met Ser Leu Leu Asp Asn Trp Asn Leu Val Ser Arg Met Pro Val
      290          295          300
Pro Arg Cys Arg Pro His Ser Leu Val Tyr Asp Gly Lys Ile Tyr Thr
305          310          315          320
Leu Gly Gly Leu Gly Val Ala Gly Asn Val Asp His Val Glu Arg
      325          330          335

```

&lt;210&gt; 1409

&lt;211&gt; 279

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1409

```

nnnatgaagt tcttggtttt ttcagaaaaa cgcgcttttt gctatgctgg ccgccccgcg
60
gcacgagata gcaccatgca actgatcgat atcggcggtca acctgaccaa cagcagtttc
120

```

cacgaccaac aggccgcaat cgtcagagcgc gcgctggagg ccggcggttac gcaaattgctg  
 180  
 ctgacaggca ccagcctggc ggtcagcgaa caagccctgg aactgtgcca tcaactggat  
 240  
 gcaagcggcg cccacctggt cgccacggcc ggctgtcac  
 279

<210> 1410  
 <211> 93  
 <212> PRT  
 <213> Homo sapiens

<400> 1410  
 Xaa Met Lys Phe Leu Val Phe Ser Glu Lys Arg Ala Phe Cys Tyr Ala  
 1 5 10 15  
 Gly Arg Pro Ala Ala Arg Asp Ser Thr Met Gln Leu Ile Asp Ile Gly  
 20 25 30  
 Val Asn Leu Thr Asn Ser Ser Phe His Asp Gln Gln Ala Ala Ile Val  
 35 40 45  
 Glu Arg Ala Leu Glu Ala Gly Val Thr Gln Met Leu Leu Thr Gly Thr  
 50 55 60  
 Ser Leu Ala Val Ser Glu Gln Ala Leu Glu Leu Cys His Gln Leu Asp  
 65 70 75 80  
 Ala Ser Gly Ala His Leu Phe Ala Thr Ala Gly Val His  
 85 90

<210> 1411  
 <211> 321  
 <212> DNA  
 <213> Homo sapiens

<400> 1411  
 nnnctgtattt caggaatgaa gaacgaacct gaatggatgc ttgaatggcg cttgagtgc  
 60  
 tttcgtgaat ggtagaaat ggaagagcct agctgggctc atgtcgatta ccctaaaatt  
 120  
 gattttcaat ctattttctta ctattccgcg ccaaaaagca tgaaggataa gcctaagtcg  
 180  
 ttagacgaag tcgatcctga attgttacgt acttatgaaa aactgggcat tcctctcata  
 240  
 gaacagcaaa tgcttgctgg tatcgccgta gatgctgtct ttgactcagt gtctgtcggt  
 300  
 actacttttc gtcaaaagct t  
 321

<210> 1412  
 <211> 107  
 <212> PRT  
 <213> Homo sapiens

<400> 1412  
 Xaa Arg Ile Ser Gly Met Lys Asn Glu Pro Glu Trp Met Leu Glu Trp  
 1 5 10 15  
 Arg Leu Ser Ala Phe Arg Glu Trp Leu Glu Met Glu Glu Pro Ser Trp

```

                20                25                30
Ala His Val Asp Tyr Pro Lys Ile Asp Phe Gln Ser Ile Ser Tyr Tyr
                35                40                45
Ser Ala Pro Lys Ser Met Lys Asp Lys Pro Lys Ser Leu Asp Glu Val
                50                55                60
Asp Pro Glu Leu Leu Arg Thr Tyr Glu Lys Leu Gly Ile Pro Leu Ile
65                70                75                80
Glu Gln Gln Met Leu Ala Gly Ile Ala Val Asp Ala Val Phe Asp Ser
                85                90                95
Val Ser Val Val Thr Thr Phe Arg Gln Lys Leu
                100                105

```

<210> 1413  
 <211> 385  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1413
atgacccatg acgtcagcga agccgtggcg attgccgacc gggatgacct gatcgaagac
60
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120
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 <212> PRT  
 <213> Homo sapiens

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Arg Pro Arg Ala Arg Gly Ser His Arg Leu Ala Ala Leu Glu Ala Glu
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Val Ile Asn Arg Val Leu Ser
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<400> 1415

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&lt;210&gt; 1418



&lt;211&gt; 1532

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1418

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Ser Thr Glu Thr Thr Ser Lys Ala Gln Thr Asp Thr Leu Thr Gln Met
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Met Thr Ser Thr Leu Phe Ser Ser Pro Ser Val His Asn Val Met Glu
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Thr Val Thr Gln Glu Thr Ala Pro Pro Asp Glu Met Thr Thr Ser Phe
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Pro Ser Ser Val Thr Asn Thr Leu Met Met Thr Ser Lys Thr Ile Thr
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Thr Ala Gly Gln Glu Gly Gln Ser Arg Lys Thr Ser Trp Arg Thr Ser
      180          185          190
Ile Gln Asp Thr Ser Ala Ser Ser Gln Asn His Trp Thr Arg Ser Thr
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Gln Thr Thr Arg Glu Ser Gln Thr Ser Thr Leu Thr His Arg Thr Thr
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225          230          235          240
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Val Asp Pro Glu Gly Gln Ser Pro Ala Thr Phe Ser Arg Thr Ser Thr
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Gln Asp Thr Thr Ala Phe Ser Lys Asn His Gln Thr Gln Ser Val Glu
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Gly His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		1375
	1380	1385
Gly Asp Thr Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		1390
	1395	1400
Gly His Ala Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		1405
	1410	1415
Gly His Ala Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Ala Ser Thr		1420
1425	1430	1435
Gly His Thr Thr Pro Leu His Val Thr Ser Pro Ser Ser Ala Ser Thr		1440
	1445	1450
Gly His Ala Thr Pro Leu Pro Val Thr Ser Pro Ser Ser Ala Ser Thr		1455
	1460	1465
Ser His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		1470
	1475	1480
Gly His Ala Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Ala Ser Thr		1485
	1490	1495
Gly His Ala Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Ala Ser Thr		1500
1505	1510	1515
Gly His Ala Thr Pro Leu Pro Val Thr Asp Thr Ser		1520
	1525	1530

&lt;210&gt; 1419

&lt;211&gt; 309

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1419

aaggctatgg gaattcaaaa gtatgtgttc tattccatcc acaactgtga caagcagcct  
60

gaggttcctt tgatggaaat caagtattgt actggtaaatt ttattcagga cagtgggtctg  
120

gattatatca tcatccgttt gtgtgggtttc atgcagggtc ttattgggca atatgctgtt  
180

cctatactag aagagaagtc cgtctgggga actgatgctc caactcggat tgcttacatg  
240

gatacccagg acgtagctcg actaacgttt atagctatgc ggaatgagaa ggccaacaag  
300

aaactcatg

309

<210> 1420  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 1420  
 Lys Ala Met Gly Ile Gln Lys Tyr Val Phe Tyr Ser Ile His Asn Cys  
 1 5 10 15  
 Asp Lys Gln Pro Glu Val Pro Leu Met Glu Ile Lys Tyr Cys Thr Gly  
 20 25 30  
 Lys Phe Ile Gln Asp Ser Gly Leu Asp Tyr Ile Ile Ile Arg Leu Cys  
 35 40 45  
 Gly Phe Met Gln Gly Leu Ile Gly Gln Tyr Ala Val Pro Ile Leu Glu  
 50 55 60  
 Glu Lys Ser Val Trp Gly Thr Asp Ala Pro Thr Arg Ile Ala Tyr Met  
 65 70 75 80  
 Asp Thr Gln Asp Val Ala Arg Leu Thr Phe Ile Ala Met Arg Asn Glu  
 85 90 95  
 Lys Ala Asn Lys Lys Leu Met  
 100

<210> 1421  
 <211> 385  
 <212> DNA  
 <213> Homo sapiens

<400> 1421  
 ccatggcggc atgggtggag agagaagctg gggagaagaa atgatgcaga gatctcgcca  
 60  
 ggccagggag ctgggctggg cagccaggag tagagaaaca acgctcccag aggaggggag  
 120  
 gatgttagag caaagccgag cccagctgct ggccaatgca tctgtgatgc ccatgagcag  
 180  
 ccaggatttc agctccgctc tacttcttga ctgctgcaga actcagcacc agctccagt  
 240  
 ccctcagagc cctgattttt cacaaccga ctctccaag cctcccctgt gggcgggata  
 300  
 cacaagccag agtcgccttg tcacatctct tctctctcca ccaggtcag ggcaaacctt  
 360  
 cctgacatac ttacgacat tacag  
 385

<210> 1422  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<400> 1422  
 Met Gly Gly Glu Arg Ser Trp Gly Glu Glu Met Met Gln Arg Ser Arg  
 1 5 10 15  
 Gln Ala Arg Glu Leu Gly Trp Ala Ala Arg Ser Arg Glu Thr Thr Leu  
 20 25 30  
 Pro Glu Glu Gly Arg Met Leu Glu Gln Ser Arg Ala Gln Leu Leu Ala

```

          35              40              45
Asn Ala Ser Val Met Pro Met Ser Ser Gln Asp Phe Ser Ser Ala Leu
   50              55              60
Leu Leu Asp Cys Cys Arg Thr Gln His Gln Leu Gln Cys Pro Gln Ser
65              70              75              80
Pro Asp Phe Ser Gln Thr Asp Ser Ser Lys Pro Pro Leu Trp Ala Gly
          85              90              95
Tyr Thr Ser Gln Ser Arg Leu Val Thr Ser Leu Leu Ser Pro Pro Gly
          100              105              110
His Gly Gln Thr Phe Leu Thr Tyr Phe Thr Thr Leu Gln
          115              120              125

```

&lt;210&gt; 1423

&lt;211&gt; 336

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1423

```

nntattcttc aatccttcca caatgtgcaa caaatggcga ttgactggct cactcgaaat
60
ctctatttttg tggaccatgt cggtgaccgg atctttgttt gtaattccaa cggttctgta
120
tgtgtcacccc tgattgatct ggagcttcac aatcctaaaag caatagcagt agatccaata
180
gcaggaaaaac ttttctttac tgactacggg aatgtcgcca aagtggagag atgtgacatg
240
gatgggatga accgaacaag gataattgat tcaaagacag agcagccagc tgcactggca
300
ctagacctag tcaacaaatt ggtttactgg gtagat
336

```

&lt;210&gt; 1424

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1424

```

Xaa Ile Leu Gln Ser Phe His Asn Val Gln Gln Met Ala Ile Asp Trp
  1              5              10              15
Leu Thr Arg Asn Leu Tyr Phe Val Asp His Val Gly Asp Arg Ile Phe
          20              25              30
Val Cys Asn Ser Asn Gly Ser Val Cys Val Thr Leu Ile Asp Leu Glu
          35              40              45
Leu His Asn Pro Lys Ala Ile Ala Val Asp Pro Ile Ala Gly Lys Leu
          50              55              60
Phe Phe Thr Asp Tyr Gly Asn Val Ala Lys Val Glu Arg Cys Asp Met
65              70              75              80
Asp Gly Met Asn Arg Thr Arg Ile Ile Asp Ser Lys Thr Glu Gln Pro
          85              90              95
Ala Ala Leu Ala Leu Asp Leu Val Asn Lys Leu Val Tyr Trp Val Asp
          100              105              110

```

&lt;210&gt; 1425

&lt;211&gt; 672

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1425

```

accggtgttt tcgatcacct gggcgggttg agtgactatc gcagtcagat cggcccgatg
60
gccccggcatg tcgaagacct ggccttggcg ctacaggtca ttgccggtga agatggggtc
120
gatgccgggg tgattccgat gccgctgcgc cgtatgcaaa ctcaaacgct gaagggggtg
180
cgagtcgcct ggtacagcga tgggtggcatt gagcccgttg acgcgctcac gcacaccaca
240
ttgcaggcgg tcgccgatct attggacgct gaaggcgctt tgatccgccc ggccttcccc
300
tcggcggttg gcaatgcccg tgacattacc gaacgctatt gggcaatgag tcaaagctcc
360
ggcgcgcatg cgatccagct gttttcagat tgggatcagt tccgtacagc catgctgggg
420
ttcatggccg actacgacat tatcctgtgc cctgtcgatg ccgcgccggc gacccaactg
480
ggagagacgc ggccagggtt gttcagttcc ccccttccta atggcttggc gggttggcct
540
tgtgtgggtg tccgggccgg aacggatagc gcgggtttgc cggttggcgt gcagattgtc
600
gcgcgacctt ggcacgagcc tgcgcggtt gcggcagcag cggccattga gcgcgcgctg
660
ccgttcacgc gt
672

```

&lt;210&gt; 1426

&lt;211&gt; 224

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1426

```

Thr Gly Val Phe Asp His Leu Gly Gly Leu Ser Asp Tyr Arg Ser Gln
 1             5             10             15
Ile Gly Pro Met Ala Arg His Val Glu Asp Leu Ala Leu Ala Leu Gln
      20             25             30
Val Ile Ala Gly Glu Asp Gly Val Asp Ala Gly Val Ile Pro Met Pro
      35             40             45
Leu Arg Arg Met Gln Thr Gln Thr Leu Lys Gly Leu Arg Val Ala Trp
      50             55             60
Tyr Ser Asp Gly Gly Ile Glu Pro Val Asp Ala Leu Thr His Thr Thr
      65             70             75             80
Leu Gln Ala Val Ala Asp Leu Leu Asp Ala Glu Gly Ala Leu Ile Arg
      85             90             95
Pro Ala Phe Pro Ser Ala Leu Ser Asn Ala Arg Asp Ile Thr Glu Arg
      100            105            110
Tyr Trp Ala Met Ser Gln Ser Ser Gly Ala Gln Ser Ile Gln Leu Phe
      115            120            125
Ser Asp Trp Asp Gln Phe Arg Thr Ala Met Leu Gly Phe Met Ala Asp
      130            135            140
Tyr Asp Ile Ile Leu Cys Pro Val Asp Ala Ala Pro Ala Thr Gln Leu

```

```

145              150              155              160
Gly Glu Thr Arg Pro Gly Leu Phe Ser Ser Pro Leu Pro Asn Gly Leu
              165              170              175
Ala Gly Trp Pro Cys Val Val Val Arg Ala Gly Thr Asp Ser Ala Gly
              180              185              190
Leu Pro Val Gly Val Gln Ile Val Ala Arg Pro Trp His Glu Pro Val
              195              200              205
Ala Leu Ala Ala Ala Ala Ala Ile Glu Arg Ala Leu Pro Phe Thr Arg
              210              215              220

```

<210> 1427

<211> 270

<212> DNA

<213> Homo sapiens

<400> 1427

```

atggcttgct atctgaagca ggtggctgcc accgtctgca taaatgggcc cagcgcagtc
60
tttgatgttc cactaagata cggggatctg gtggtgacac ccatgcgact ggcttcggaa
120
ttgatgcaag tccatccctc aggggctgta cgcttccgctc actgttcagt tccccagaat
180
aaactcaact cacaaaaagat acttccggtg gaaaaggccc aagggaagat cctcttcatt
240
gcaggagaga atgacgaaaag cttggctagc
270

```

<210> 1428

<211> 90

<212> PRT

<213> Homo sapiens

<400> 1428

```

Met Ala Cys Tyr Leu Lys Gln Val Ala Ala Thr Val Cys Ile Asn Gly
 1          5          10          15
Pro Ser Ala Val Phe Asp Val Pro Leu Arg Tyr Gly Asp Leu Val Val
          20          25          30
Thr Pro Met Arg Leu Ala Ser Glu Leu Met Gln Val His Pro Ser Gly
          35          40          45
Ala Val Arg Phe Arg His Cys Ser Val Pro Gln Asn Lys Leu Asn Ser
          50          55          60
Gln Lys Ile Leu Pro Val Glu Lys Ala Gln Gly Lys Ile Leu Phe Ile
65          70          75          80
Ala Gly Glu Asn Asp Glu Ser Leu Ala Ser
          85          90

```

<210> 1429

<211> 384

<212> DNA

<213> Homo sapiens

<400> 1429

```

ncctagggga ttatcgacat aaacgcgact gcgtaagggtt ggtgactcat cccccagcga
60

```



catgaggcaa acgccatgac atccgagaat gcaccgccgc gaggcaagat catcatgatg  
 120  
 gcggtgatcg ccggcgcggt ggtcaccaac atttactgca cccagccggt gctgccgttg  
 180  
 atcgccctcg acatgggcgt cgcagtgtcg acgggtcaacc tgggtggcagg cgcggccttg  
 240  
 ctgggggttg ccaccgggtt ggcgttttta ttgcccattg gcgaccgctt tgaccggcgc  
 300  
 aagctggtac tcgggcagat tgcgctggcg ttctgctttg ccttggcggc ggcttttgcg  
 360  
 ccgaggatct gggcgttgat cggc  
 384

<210> 1430

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1430

Met	Thr	Ser	Glu	Asn	Ala	Pro	Pro	Arg	Gly	Lys	Ile	Ile	Met	Met	Ala
1				5					10					15	
Val	Ile	Ala	Gly	Ala	Val	Val	Thr	Asn	Ile	Tyr	Cys	Thr	Gln	Pro	Val
			20					25					30		
Leu	Pro	Leu	Ile	Ala	Ser	Asp	Met	Gly	Val	Ala	Val	Ser	Thr	Val	Asn
			35				40					45			
Leu	Val	Ala	Gly	Ala	Ala	Leu	Leu	Gly	Phe	Ala	Thr	Gly	Leu	Ala	Phe
			50				55				60				
Leu	Leu	Pro	Met	Gly	Asp	Arg	Phe	Asp	Arg	Arg	Lys	Leu	Val	Leu	Gly
65					70				75					80	
Gln	Ile	Ala	Leu	Ala	Phe	Cys	Phe	Ala	Leu	Ala	Ala	Ala	Phe	Ala	Pro
				85					90					95	
Arg	Ile	Trp	Ala	Leu	Ile	Gly									
				100											

<210> 1431

<211> 414

<212> DNA

<213> Homo sapiens

<400> 1431

aagcttcagg gcagggtgcc cctgaagtca agcctgattc tgcattcatct tgtatagcac  
 60  
 aaactggcga cacctgtgac tttgcctttc ccagggtccc tgctctccgc tccaggtagg  
 120  
 ctcagcctga gggagggtgct ggcaggagcc tcggaggcag gaggggctgg cgtgcttcac  
 180  
 tccttcagct tgtcttggga gagctgtggg ctgcatcccc ctggctcctc gtcccacagg  
 240  
 cagccccgct gtgtgtctgg tcttgcagggt tggctgcagc ttctgggccc tgcttccagc  
 300  
 ccctcttccc atgatactcc agccttggaa ggtgtaatag tttcccatgt tgctgatctt  
 360  
 tagtttgctt ccctctcctt ggctgttctt tctgctgttc catcctctgt gcac  
 414

<210> 1432  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 1432  
 Met Gly Asn Tyr Tyr Thr Phe Gln Gly Trp Arg Ile Met Gly Arg Gly  
 1 5 10 15  
 Ala Gly Ser Arg Ala Gln Lys Leu Gln Pro Thr Cys Lys Thr Arg His  
 20 25 30  
 Thr Ala Gly Leu Pro Val Gly Arg Gly Ala Arg Gly Met Gln Pro Thr  
 35 40 45  
 Ala Leu Pro Arg Gln Ala Glu Gly Val Lys His Ala Ser Pro Ser Cys  
 50 55 60  
 Leu Arg Gly Ser Cys Gln His Leu Pro Gln Ala Glu Pro Thr Trp Ser  
 65 70 75 80  
 Gly Glu Gln Gly Pro Trp Glu Arg Gln Ser His Arg Cys Arg Gln Phe  
 85 90 95  
 Val Leu Tyr Lys Met Met Gln Asn Gln Ala  
 100 105

<210> 1433  
 <211> 294  
 <212> DNA  
 <213> Homo sapiens

<400> 1433  
 aaattttcga tggaactggg cggcaatgca ccgtttattg tatttgatga tgcggatgtg  
 60  
 gacgcggccg tcagcaatgc tgtggcttgc aagttccgct gtggtggaca aacgtgcatt  
 120  
 tcggccaacc gaatctacgt gcacgaacaa gtgcacgacg agtttgtctc taagtttggc  
 180  
 gagagagtca agaagcttcg cgtgggctac ggtctggacg aaaacatcaa cattggaccg  
 240  
 ctagtgaatg aggctagtca ggacaaagca gagtcacatg tccgtgcatg gcaa  
 294

<210> 1434  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 1434  
 Lys Phe Ser Met Glu Leu Gly Gly Asn Ala Pro Phe Ile Val Phe Asp  
 1 5 10 15  
 Asp Ala Asp Val Asp Ala Ala Val Ser Asn Ala Val Ala Cys Lys Phe  
 20 25 30  
 Arg Cys Gly Gly Gln Thr Cys Ile Ser Ala Asn Arg Ile Tyr Val His  
 35 40 45  
 Glu Gln Val His Asp Glu Phe Val Ser Lys Phe Gly Glu Arg Val Lys  
 50 55 60  
 Lys Leu Arg Val Gly Tyr Gly Leu Asp Glu Asn Ile Asn Ile Gly Pro

65		70		75		80									
Leu	Val	Asn	Glu	Ala	Ser	Gln	Asp	Lys	Ala	Glu	Ser	His	Val	Arg	Ala
				85					90					95	
Met	Gln														

&lt;210&gt; 1435

&lt;211&gt; 1772

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1435

```

ntttctggct tatgtggttt ccccggtgtg gaggtgggat ccactccccg catagtctct
60
cgtggcgatg ggacacctgg aaagtgctgt gatgtctttg aatgtgttaa tgatacaaa
120
ccagcctgcg tatttaacaa tgtggaatat tatgatggag acatgtttcg aatggacaac
180
tgtcggttct gtcgatgcc aagggggcgt gccatctgct tctactgcca gtgtggtgag
240
ataaactgcg agaggtacta cgtgcccga ggagagtgtg gccagtggtg tgaaatccag
300
tgtatccttt taataatccc gctggctgct gccaatggcc tgatccttgc ccacggagac
360
cgggtggcggg aagacgactg cacattctgc cagtgcgtca acggtgaacg ccactgcgtt
420
gcgaccgtct gcggacagac ctgcacaaac cctgtgaaag tgccctgggga gtgttgccct
480
gtgtgcgaag aaccaaccat catcacagtt gatccacctg catgtgggga gttatcaaac
540
tgactctga cagggaaagga ctgcattaat ggtttcaaac gcgatcaciaa tggttgtcgg
600
acctgtcagt gcataaacac cgaggaacta tggttcagaac gtaaacaagg ctgcaccttg
660
aactgtccct tcggtttctt tactgatgcc caaaactgtg agatctgtga gtgccgcccc
720
agggccaaga agtgcagacc cataatctgt gacaagtatt gtccacttgg attgctgaag
780
aataagcacg gctgtgacat ctgtcgctgt aagaaatgtc cagagctctc atgcagtaag
840
natctgcccc ttgggtttcc agcaggacag tcacggctgt cttatctgca agtgcagaga
900
ggcctctgct tcagctgggc caccatcct gtcgggcaact tgtctcaccg tggatggtca
960
tcatcataaa aatgaggaga gctggcacga tgggtgccgg gaatgctact gtctcaatgg
1020
acgggaaatg tgtgccctga tcacctgcc ggtgcctgcc tgtggcaacc ccaccattca
1080
ccctggacag tgctgcccac catgtgcaga tgactttgtg gtgcagaagc cagagctcag
1140
tactccnct ccatttgcca cggccctgga ggagaatact ttgtggaagg agaaacgtgg
1200
aacattgact cctgtactca gtgcacctgc cacagcggac ggggtgctgtg tgagacagag
1260

```

gtgtgcccac cgctgctctg ccagaacccc tcacgcaccc aggattcctg ctgcccacag  
 1320  
 tgtacagatc aaccttttcg gccttccttg tcccgcata acagcgtacc taattactgc  
 1380  
 aaaaatgatg aaggggatat attcctggca gctgagtcct ggaagcctga cgtttgtacc  
 1440  
 agctgcatct gcattgatag cgtaattagc tgtttctctg agtcctgccc ttctgtatcc  
 1500  
 tgtgaaaaac ctgtcttgag aaaaggccag tgttgccct actgcataga agacacaatt  
 1560  
 ccaaagaagg tgggtgtgcca cttcagtggg aaggcctatg ccgacgagga gcggtgggac  
 1620  
 cttgacagct gcacccactg ctactgctg cagggccaga ccttctgctc gaccgtcagc  
 1680  
 tgccccctc tgccctgtgt tgagcccatc aacgtggaag gaagttgctg cccaatgtgt  
 1740  
 ccagaaatgt atgtcccagt cccttcacgc gt  
 1772

<210> 1436

<211> 322

<212> PRT

<213> Homo sapiens

<400> 1436

Xaa	Ser	Gly	Leu	Cys	Gly	Phe	Pro	Val	Cys	Glu	Val	Gly	Ser	Thr	Pro
1				5					10					15	
Arg	Ile	Val	Ser	Arg	Gly	Asp	Gly	Thr	Pro	Gly	Lys	Cys	Cys	Asp	Val
			20					25					30		
Phe	Glu	Cys	Val	Asn	Asp	Thr	Lys	Pro	Ala	Cys	Val	Phe	Asn	Asn	Val
		35					40					45			
Glu	Tyr	Tyr	Asp	Gly	Asp	Met	Phe	Arg	Met	Asp	Asn	Cys	Arg	Phe	Cys
	50					55					60				
Arg	Cys	Gln	Gly	Gly	Val	Ala	Ile	Cys	Phe	Thr	Ala	Gln	Cys	Gly	Glu
65					70					75					80
Ile	Asn	Cys	Glu	Arg	Tyr	Tyr	Val	Pro	Glu	Gly	Glu	Cys	Cys	Pro	Val
				85					90					95	
Cys	Glu	Ile	Gln	Cys	Ile	Leu	Leu	Ile	Ile	Pro	Leu	Ala	Ala	Ala	Asn
			100						105				110		
Gly	Leu	Ile	Leu	Ala	His	Gly	Asp	Arg	Trp	Arg	Glu	Asp	Asp	Cys	Thr
		115					120					125			
Phe	Cys	Gln	Cys	Val	Asn	Gly	Glu	Arg	His	Cys	Val	Ala	Thr	Val	Cys
	130					135					140				
Gly	Gln	Thr	Cys	Thr	Asn	Pro	Val	Lys	Val	Pro	Gly	Glu	Cys	Cys	Pro
145					150					155					160
Val	Cys	Glu	Glu	Pro	Thr	Ile	Ile	Thr	Val	Asp	Pro	Pro	Ala	Cys	Gly
				165					170					175	
Glu	Leu	Ser	Asn	Cys	Thr	Leu	Thr	Gly	Lys	Asp	Cys	Ile	Asn	Gly	Phe
			180					185					190		
Lys	Arg	Asp	His	Asn	Gly	Cys	Arg	Thr	Cys	Gln	Cys	Ile	Asn	Thr	Glu
	195					200						205			
Glu	Leu	Cys	Ser	Glu	Arg	Lys	Gln	Gly	Cys	Thr	Leu	Asn	Cys	Pro	Phe
	210					215					220				
Gly	Phe	Leu	Thr	Asp	Ala	Gln	Asn	Cys	Glu	Ile	Cys	Glu	Cys	Arg	Pro

```

225          230          235          240
Arg Pro Lys Lys Cys Arg Pro Ile Ile Cys Asp Lys Tyr Cys Pro Leu
          245          250          255
Gly Leu Leu Lys Asn Lys His Gly Cys Asp Ile Cys Arg Cys Lys Lys
          260          265          270
Cys Pro Glu Leu Ser Cys Ser Lys Xaa Leu Pro Leu Gly Phe Pro Ala
          275          280          285
Gly Gln Ser Arg Leu Ser Tyr Leu Gln Val Gln Arg Gly Leu Cys Phe
          290          295          300
Ser Trp Ala Thr His Pro Val Gly His Leu Ser His Arg Gly Trp Ser
305          310          315          320
Ser Ser

```

<210> 1437  
 <211> 372  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1437
cggggaactgt gctcgccac catccggtga ccggtgtcgg gcagtggcaa ctcaacaccc
60
aggccatgac cggagccatc ccgagcagca ggtgcacggc ccgggccggt gactcgtgga
120
cccgtaccct catgacctcg atgcaacttc cacggtggtc caccgatcac atcgaccgct
180
cgggccatgt cgatgctgag cagttcgacc ggttgcgag cgagttcctg tcccgtgggc
240
acagttcttg ccctgccgca catgggggtcc tgggacttgg ccggggcctg ggtggccaga
300
cgcggtttct ccccgagttc cgtcgcgag aatcttccga gggcacagtt cgagttgttc
360
tgccgcacgc gt
372

```

<210> 1438  
 <211> 62  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1438
Met Ser Met Leu Ser Ser Ser Thr Gly Cys Ala Ala Ser Ser Cys Pro
1          5          10          15
Val Gly Thr Val Leu Ala Leu Pro His Met Gly Ser Trp Asp Leu Ala
          20          25          30
Gly Ala Trp Val Ala Arg Arg Gly Phe Ser Pro Ser Ser Val Ala Glu
          35          40          45
Asn Leu Pro Arg Ala Gln Phe Glu Leu Phe Cys Arg Thr Arg
          50          55          60

```

<210> 1439  
 <211> 471  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1439

accggtttgc tttccacaag gagagctaaa atgccggttg ctaagcagca tacatgccgc  
 60  
 tgcttctttc cacaatgtag acttaaaaaa atcgccgtaa acattttacc atatgattga  
 120  
 gtcaggtgtg gggagtcgca gtaaacattt taccatgtga ttgagtcatg ggtggggagt  
 180  
 cgcggaata cacagggcag gcagttcgct atcacgatgt tctctctcat ttctgtcttt  
 240  
 ggtctgtctt cctgggtaat gtcacatgga gaccagggg atctgccatc agctgtgtgc  
 300  
 agtgggttaa caagacgacg gggaacttca gagtgcaggc agtcctcatc tttggcagat  
 360  
 tctgtatttg cacattcacc cactcactga aatgcatttg taaccccaaa atcaatacag  
 420  
 cggtttcaca gtcattttcc gacacgggca gaggggtgaa gatactgagt c  
 471

&lt;210&gt; 1440

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1440

Met	Gly	Gly	Glu	Ser	Arg	Lys	Tyr	Thr	Gly	Gln	Ala	Val	Arg	Tyr	His
1				5					10					15	
Asp	Val	Leu	Ser	His	Phe	Cys	Leu	Trp	Ser	Val	Phe	Leu	Gly	Asn	Val
			20					25					30		
Thr	Trp	Arg	Pro	Arg	Gly	Ser	Ala	Ile	Ser	Cys	Val	Gln	Trp	Val	Asn
			35				40					45			
Lys	Thr	Thr	Gly	Asn	Phe	Arg	Val	Gln	Ala	Val	Leu	Ile	Phe	Gly	Arg
	50					55					60				
Phe	Cys	Ile	Cys	Thr	Phe	Thr	His	Ser	Leu	Lys	Cys	Ile	Cys	Asn	Pro
65					70				75					80	
Lys	Ile	Asn	Thr	Ala	Val	Ser	Gln	Ser	Phe	Ser	Asp	Thr	Gly	Arg	Gly
			85					90					95		
Val	Lys	Ile	Leu	Ser											
			100												

&lt;210&gt; 1441

&lt;211&gt; 376

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1441

nnngagtcgc ggggaccttc atggactctc tcgtgctccg tagctcacac tcaccgcagc  
 60  
 gcagctcaca ttcaccacac gggaactcac tctcaccaca cggcagctca ctctctctgc  
 120  
 accgcagctc aactcaccg caccgcagct cactctcacc gcacggcagc tcacactcac  
 180  
 cacacagcag ctactctta ccggacgggg aacctaaact taccggacgg gaagcctcac  
 240

tctcaccgca cggaaagctc acactcaccg caccgcagcc actctcaccg cacggcagct  
 300  
 cactctcacc gcaccgcagc tcactctcac cggacgggag ctactctca ccacacggca  
 360  
 cctcactctc acgcgt  
 376

<210> 1442  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<400> 1442  
 Xaa Glu Ser Arg Gly Pro Ser Trp Thr Leu Ser Cys Ser Val Ala His  
 1 5 10 15  
 Thr His Arg Thr Ala Ala His Ile His His Thr Gly Thr His Ser His  
 20 25 30  
 His Thr Ala Ala His Ser Leu Cys Thr Ala Ala His Thr His Arg Thr  
 35 40 45  
 Ala Ala His Ser His Arg Thr Ala Ala His Thr His His Thr Ala Ala  
 50 55 60  
 His Ser Tyr Arg Thr Gly Asn Leu Asn Leu Pro Asp Gly Lys Pro His  
 65 70 75 80  
 Ser His Arg Thr Glu Ser Ser His Ser Pro His Arg Ser His Ser His  
 85 90 95  
 Arg Thr Ala Ala His Ser His Arg Thr Ala Ala His Ser His Arg Thr  
 100 105 110  
 Gly Ala His Ser His His Thr Ala Pro His Ser His Ala  
 115 120 125

<210> 1443  
 <211> 286  
 <212> DNA  
 <213> Homo sapiens

<400> 1443  
 atggcagccc tgcgtcccaa ggagctgcc aactaatgg tcgccatcgg caatgcgagc  
 60  
 ataaaaacgga caacacgctg cctgatcgaa tggcaactcc acaccatgac ccgtcctgcg  
 120  
 gaagccgcta cgacttcttg ggctgacatc gactgcgaca agaaaacctg gacgatccca  
 180  
 gcggagcgta tgaaaaagcg acgtgcccac gtcataccgc taaccgagca cgcacttgcc  
 240  
 ttgcttgaga caatcaaacc ctacagcggn cacagagagt acgcgt  
 286

<210> 1444  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

<400> 1444  
 Met Ala Ala Leu Arg Pro Lys Glu Leu Pro Gln Leu Met Val Ala Ile

```

      1             5             10             15
Gly Asn Ala Ser Ile Lys Arg Thr Thr Arg Cys Leu Ile Glu Trp Gln
      20             25             30
Leu His Thr Met Thr Arg Pro Ala Glu Ala Ala Thr Thr Ser Trp Ala
      35             40             45
Asp Ile Asp Cys Asp Lys Lys Thr Trp Thr Ile Pro Ala Glu Arg Met
      50             55             60
Lys Lys Arg Arg Ala His Val Ile Pro Leu Thr Glu His Ala Leu Ala
      65             70             75             80
Leu Leu Glu Thr Ile Lys Pro Tyr Ser Gly His Arg Glu Tyr Ala
      85             90             95

```

&lt;210&gt; 1445

&lt;211&gt; 294

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1445

```

naccgggttca ccggggaggc cttcgatggg ggcaagggtca gcatgggttg cccgattccc
60
atgtacctgt atggcacctt cgtcgttccg gacttcgacg cattcatctc cggcaagcag
120
actccctacc gggagacggg ctccaagcgg accactactt gggtctttcg agccgggtca
180
gaggtttatg agctggcct ccccgagga gtcgtgttcg ccatgcaaag cgctcggtg
240
agggtggacc ccgacaacac cgtcgacaag ctgccaacac tcggcgagcg cctg
294

```

&lt;210&gt; 1446

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1446

```

Xaa Arg Phe Thr Gly Glu Ala Phe Asp Gly Gly Lys Val Ser Met Val
      1             5             10             15
Gly Pro Ile Pro Met Tyr Leu Tyr Gly Thr Phe Val Val Pro Asp Phe
      20             25             30
Asp Ala Phe Ile Ser Gly Lys Gln Thr Pro Tyr Arg Glu Thr Val Ser
      35             40             45
Lys Arg Thr Thr Thr Trp Phe Phe Arg Ala Gly Ser Glu Val Tyr Glu
      50             55             60
Leu Ala Xaa Pro Arg Gly Val Val Phe Ala Met Gln Ser Ala Ser Leu
      65             70             75             80
Arg Val Asp Pro Asp Asn Thr Val Asp Lys Leu Pro Thr Leu Gly Glu
      85             90             95
Arg Leu

```

&lt;210&gt; 1447

&lt;211&gt; 363

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens



&lt;400&gt; 1447

```

nnncagaacc agaagatcaa cctgcatgac ggctcgttct ccgacgttgg cggcatggtg
60
ggtaatatct ccattgccca ggggtgtcacg atcgagaacg ccgtcggcgg ttctgggcaac
120
gacctgctga tcggcaacga tgcggccaac gaactgcgcg gcggtgccgg caacgatatc
180
ctctacgggg ctggcgggtgc cgaccagggtt tgggttggtt cgggcaacaa taccttcgtg
240
ttcgccgcgg tttccgactc ggcgccgaaa gcggccgacc ggatcatgga cttcaccagt
300
ggccaggaca agatcgatct gtccgggatc acccatgggt cgggcctgac cttegtcaac
360
gcg
363

```

&lt;210&gt; 1448

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1448

Xaa	Gln	Asn	Gln	Lys	Ile	Asn	Leu	His	Asp	Gly	Ser	Phe	Ser	Asp	Val
1				5					10					15	
Gly	Gly	Met	Val	Gly	Asn	Ile	Ser	Ile	Ala	Gln	Gly	Val	Thr	Ile	Glu
			20					25					30		
Asn	Ala	Val	Gly	Gly	Ser	Gly	Asn	Asp	Leu	Leu	Ile	Gly	Asn	Asp	Ala
		35					40					45			
Ala	Asn	Glu	Leu	Arg	Gly	Gly	Ala	Gly	Asn	Asp	Ile	Leu	Tyr	Gly	Ala
	50					55					60				
Gly	Gly	Ala	Asp	Gln	Val	Trp	Val	Gly	Ser	Gly	Asn	Asn	Thr	Phe	Val
65				70					75					80	
Phe	Ala	Ala	Val	Ser	Asp	Ser	Ala	Pro	Lys	Ala	Ala	Asp	Arg	Ile	Met
			85					90					95		
Asp	Phe	Thr	Ser	Gly	Gln	Asp	Lys	Ile	Asp	Leu	Ser	Gly	Ile	Thr	His
		100					105						110		
Gly	Ser	Gly	Leu	Thr	Phe	Val	Asn	Ala							
	115						120								

&lt;210&gt; 1449

&lt;211&gt; 541

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1449

```

aggcgctacc agattatggg ctgcccgacc tcaatgacat gcgcttgagc ctgcatgaat
60
cactcagcca atcgcgcttg gcgattgaac gctttatcca ggcgtagcag cctcggttgg
120
ggaatgtacg tgtcaggagg agggaggggtg cctacaaccc tttggtactg gcgtttgtga
180
ttgaggcaac cgtcgtcatc gatggtgtca tccaacctgt ggtgtttaac gcacacctgg
240

```

tggggggggg gacgggtcga gtgtgttacc tgatgttctt tgagctcttt taccagagtg  
 300  
 aactcagtgc attgcgcacg cttggggcggc gtttttctga acgcaatccc gccctggcac  
 360  
 cctttcttgc cgattccagg ccaggacccg gacgtcgagg gtctattgaa agtctttgcc  
 420  
 tttctccccg ggcgcctgcg ccagaagctt gctgacgagc ttctgagggt gaccattca  
 480  
 ttgatgcact tgggtgtggc caattacatg cggccattgc cggccttcag tattttgcag  
 540  
 t  
 541

<210> 1450

<211> 138

<212> PRT

<213> Homo sapiens

<400> 1450

Met	Arg	Leu	Ser	Leu	His	Glu	Ser	Leu	Ser	Gln	Ser	Arg	Leu	Ala	Ile
1				5					10					15	
Glu	Arg	Phe	Ile	Gln	Ala	Tyr	Glu	Pro	Arg	Leu	Gly	Asn	Val	Arg	Val
			20					25					30		
Arg	Arg	Arg	Glu	Gly	Ala	Tyr	Asn	Pro	Leu	Val	Leu	Ala	Phe	Val	Ile
			35				40					45			
Glu	Ala	Thr	Val	Val	Ile	Asp	Gly	Val	Ile	Gln	Pro	Val	Val	Phe	Asn
			50			55				60					
Ala	His	Leu	Val	Gly	Gly	Gly	Thr	Gly	Arg	Val	Cys	Tyr	Leu	Met	Phe
65					70				75					80	
Phe	Glu	Leu	Phe	Tyr	Gln	Ser	Glu	Leu	Ser	Ala	Leu	Arg	Thr	Leu	Gly
			85						90					95	
Arg	Arg	Phe	Ser	Glu	Arg	Asn	Pro	Ala	Leu	Ala	Pro	Phe	Leu	Ala	Asp
			100					105					110		
Ser	Arg	Pro	Gly	Pro	Gly	Arg	Arg	Gly	Ser	Ile	Glu	Ser	Leu	Cys	Leu
			115				120						125		
Ser	Pro	Arg	Ala	Pro	Ala	Pro	Glu	Ala	Cys						
			130				135								

<210> 1451

<211> 326

<212> DNA

<213> Homo sapiens

<400> 1451

aggcctctgg cgagttgatc tacagcttcg gaccgggtgc tatggctact ggcgtcaagt  
 60  
 acacgaacac agtttgcact cctgtgggcg actacgaggt ggtgctgacg gattcttggg  
 120  
 gtgatggctg gaaccggggt tcttacctga acatgtacga cagctcggac aacttgatcc  
 180  
 aggagttcac gatggattac gacgcctctt ctcgtaacat taaggagaag cacggcttct  
 240  
 tcacgggtggc ttccaccacg agcagcggca ctgtctggaa gattatggcg aacaagaagg  
 300

tggacaagga gtggaactct gtggac  
326

<210> 1452  
<211> 95  
<212> PRT  
<213> Homo sapiens

<400> 1452  
Met Ala Thr Gly Val Lys Tyr Thr Asn Thr Val Cys Thr Pro Val Gly  
1 5 10 15  
Asp Tyr Glu Val Val Leu Thr Asp Ser Trp Gly Asp Gly Trp Asn Pro  
20 25 30  
Gly Ser Tyr Leu Asn Met Tyr Asp Ser Ser Asp Asn Leu Ile Gln Glu  
35 40 45  
Phe Thr Met Asp Tyr Asp Ala Ser Ser Arg Asn Ile Lys Glu Lys His  
50 55 60  
Gly Phe Phe Thr Val Ala Ser Thr Thr Ser Ser Gly Thr Val Trp Lys  
65 70 75 80  
Ile Met Ala Asn Lys Lys Val Asp Lys Glu Trp Asn Ser Val Asp  
85 90 95

<210> 1453  
<211> 326  
<212> DNA  
<213> Homo sapiens

<400> 1453  
cggccgcgcg gccccacgtg caccgcgtgc atggtccctc gaggacgcgc atctgcagcc  
60  
cccgtcccc gcaaacctcc aggccggaga gctccggcca aggccgctgc atcacatgat  
120  
acaggagggg catgcacacg ctcacgtgca cacagcctca aacacgctca tccgtacata  
180  
caggagtgtg tgaacgcact gaggtgcaca ggacaaagac acagacacct gtttgcacac  
240  
cgactgcct atagaaatgt gcaaaccacc cgtgcgcaca ggcccctcca cccatgcagg  
300  
cgtgtgcaca tcacccacac ggacac  
326

<210> 1454  
<211> 98  
<212> PRT  
<213> Homo sapiens

<400> 1454  
Met Val Pro Arg Gly Arg Ala Ser Ala Ala Pro Ala Pro Arg Lys Pro  
1 5 10 15  
Pro Gly Arg Arg Ala Pro Ala Lys Ala Ala Ala Ser His Asp Thr Gly  
20 25 30  
Gly Ala Cys Thr Arg Ser Arg Ala His Ser Leu Lys His Ala His Pro  
35 40 45  
Tyr Ile Gln Glu Cys Val Asn Ala Leu Arg Cys Thr Gly Gln Arg His

50	55	60
Arg His Leu Phe Ala His Arg Leu Ala Tyr Arg Asn Val Gln Thr Thr		
65	70	75
Arg Ala His Arg Pro Leu His Pro Cys Arg Arg Val His Ile Thr His		80
85	90	95
Thr Asp		

<210> 1455  
 <211> 314  
 <212> DNA  
 <213> Homo sapiens

<400> 1455  
 gatccagtc aaaaagcatg tggggttgct cacgctgggt ggaaagggtac tttgttgggt  
 60  
 gttgctatgg ctacagtga tgctatgata gcagaatatg gctgccgttt ggaaaaactt  
 120  
 tgggtggacct tggacccttc agtgggacct ggctgtttta ctcttcagg ggaatcagca  
 180  
 gaggcatttc ataattctca tcctgcatgt gtacaactat ttgattcacc aaatccctgt  
 240  
 atcgacatcc gtaaagccac aagataacttg actggatttt tgtataactg cttcctgcct  
 300  
 ccttccaaac tgac  
 314

<210> 1456  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 1456
Asp Pro Val Lys Lys Ala Cys Gly Val Ala His Ala Gly Trp Lys Gly
1 5 10 15
Thr Leu Leu Gly Val Ala Met Ala Thr Val Asn Ala Met Ile Ala Glu
20 25 30
Tyr Gly Cys Arg Leu Glu Lys Leu Trp Trp Thr Leu Asp Pro Ser Val
35 40 45
Gly Pro Gly Cys Phe Thr Leu Pro Gly Glu Ser Ala Glu Ala Phe His
50 55 60
Asn Leu His Pro Ala Cys Val Gln Leu Phe Asp Ser Pro Asn Pro Cys
65 70 75 80
Ile Asp Ile Arg Lys Ala Thr Arg Tyr Leu Thr Gly Phe Leu Tyr Asn
85 90 95
Cys Phe Leu Pro Pro Ser Lys Leu
100

<210> 1457  
 <211> 437  
 <212> DNA  
 <213> Homo sapiens

<400> 1457

nattcaccag aatccccaga atcccccaaa tactacattg cacttttaggg ttcctttcta  
 60  
 gcacatgcat tgctaaaatc ggcgcccaga acctttctctg cccctctccc atgggatgca  
 120  
 atgtcagcgg agaaacagac caagtctgca ctagcctgtc cctacaccct ccccaggaaa  
 180  
 aggtccccct gcgccaagtc aacagctccc agaggaagcc cactgactgc tctcttcagg  
 240  
 gtggggggaca caggaagtcc acgcttgac ggaggggacg ggcacaccta ccgtgactgc  
 300  
 cagagcccat tttgggagtc tgattggaat ttatacagca ggagcactgg gcactcggac  
 360  
 aactccagcc cacaaccaag tcactgggct gcctaccac tgcccaagtg cctcaagtca  
 420  
 acacattcct gcaactgn  
 437

<210> 1458  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 1458  
 Met Ser Ala Glu Lys Gln Thr Lys Ser Ala Leu Ala Cys Pro Tyr Thr  
 1 5 10 15  
 Leu Pro Arg Lys Arg Ser Pro Cys Ala Lys Ser Thr Ala Pro Arg Gly  
 20 25 30  
 Ser Pro Leu Thr Ala Leu Phe Arg Val Gly Asp Thr Gly Ser Pro Arg  
 35 40 45  
 Leu His Gly Gly Asp Gly His Thr Tyr Arg Asp Cys Gln Ser Pro Phe  
 50 55 60  
 Trp Glu Ser Asp Trp Asn Leu Tyr Ser Arg Ser Thr Gly His Ser Asp  
 65 70 75 80  
 Asn Ser Ser Pro Gln Pro Ser His Trp Ala Ala Tyr Pro Leu Pro Lys  
 85 90 95  
 Cys Leu Lys Ser Thr His Ser Cys Thr  
 100 105

<210> 1459  
 <211> 295  
 <212> DNA  
 <213> Homo sapiens

<400> 1459  
 ngagaggtca cccgccacga gattcccgcg gaggtcgcgc cccgccgcgc gggcgacccg  
 60  
 gccgtactca tcgcttcttc ggagaagatc aagcgggagc tgggctggaa cccgacgcgc  
 120  
 acggatctgc gccgcacgt cgaggacgcc tgggccttta cggctggggg ggccgaacgg  
 180  
 taaacccttg gtaaggcgac gcagttatcc tcgatctcct cccagagcag gcggcagccc  
 240  
 gccactgcgg tgtcgagcat gccctcccac tccccgatcg ccatgagctg gcgan  
 295

<210> 1460  
 <211> 60  
 <212> PRT  
 <213> Homo sapiens

<400> 1460  
 Xaa Glu Val Thr Gly His Glu Ile Pro Ala Glu Val Ala Pro Arg Arg  
 1 5 10 15  
 Ala Gly Asp Pro Ala Val Leu Ile Ala Ser Ser Glu Lys Ile Lys Arg  
 20 25 30  
 Glu Leu Gly Trp Asn Pro Thr Arg Thr Asp Leu Arg Arg Ile Val Glu  
 35 40 45  
 Asp Ala Trp Ala Phe Thr Ala Gly Gly Ala Glu Arg  
 50 55 60

<210> 1461  
 <211> 432  
 <212> DNA  
 <213> Homo sapiens

<400> 1461  
 nnaagctttac gtgaaatgaa acgtcaatgg caacaggcga caatcgtgcc agagaaattg  
 60  
 gttgaagcac agtcaattgc gggttctaaa tgcgaaacacg cctggcgctt acaacgttca  
 120  
 gaaaatgact gggtaggctt tgaaaaaaat tggaaaagagg ttgttgcatt atccccgtgaa  
 180  
 gaagcacaaa ttcgcggtga agcgcttaat ctaacgcctt atgatgcat gcttgataag  
 240  
 tttgaaccag gcacgacaac ggtttcgtc aatactttgt tttcaaagg aaagacgtgg  
 300  
 ttacctacgt taattgaaaa agcgtagaa aagcagcaat cagaatctat cattatgcca  
 360  
 tcaggcacct tttccacggc gaatcaaaaa gcccttgat tagaaataat gaaattgtta  
 420  
 aaattcgact tt  
 432

<210> 1462  
 <211> 144  
 <212> PRT  
 <213> Homo sapiens

<400> 1462  
 Xaa Ser Leu Arg Glu Met Lys Arg Gln Trp Gln Gln Ala Thr Ile Val  
 1 5 10 15  
 Pro Glu Lys Leu Val Glu Ala Gln Ser Ile Ala Gly Ser Lys Cys Glu  
 20 25 30  
 His Ala Trp Arg Leu Gln Arg Ser Glu Asn Asp Trp Val Gly Phe Glu  
 35 40 45  
 Lys Asn Trp Lys Glu Val Val Ala Leu Ser Arg Glu Glu Ala Gln Ile  
 50 55 60  
 Arg Gly Glu Ala Leu Asn Leu Thr Pro Tyr Asp Ala Met Leu Asp Lys

65					70					75					80
Phe	Glu	Pro	Gly	Thr	Thr	Thr	Val	Ser	Leu	Asn	Thr	Leu	Phe	Ser	Lys
				85					90					95	
Val	Lys	Thr	Trp	Leu	Pro	Thr	Leu	Ile	Glu	Lys	Ala	Leu	Glu	Lys	Gln
			100					105					110		
Gln	Ser	Glu	Ser	Ile	Ile	Met	Pro	Ser	Gly	Thr	Phe	Ser	Thr	Ala	Asn
		115					120					125			
Gln	Lys	Ala	Leu	Gly	Leu	Glu	Ile	Met	Lys	Leu	Leu	Lys	Phe	Asp	Phe
	130						135					140			

&lt;210&gt; 1463

&lt;211&gt; 421

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1463

```

nacgcgttcc agagcaagct ggacctgacc gccttcgaat tcttctccga caaggccctg
60
gccaaagtca tgggcccgtgg cgacgtaccg gcaccgttcg aaaccgaatg cccgttctac
120
gcgctgctgg aattcgaagc caccaccgaa gaagtcgcca accacgcctt ggaaaccttc
180
gagcactgcg ttgagcaggg ctgggtgctg gacggcgtga tgagccagag cgaaacccaa
240
ctgcacaacc tgtggaaact gcgcgagtac atctcggaga ctatttccca ctggacgccc
300
tacaagaacg acatctccgt gaccgtttcc aaagtccccg cgttcttgaa ggaaattgac
360
gcgatcgctg tgagcattac ccggacttcg aaattgttgg tcggccacat cggcgacgca
420
a
421

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&lt;210&gt; 1464

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1464

Xaa	Ala	Phe	Gln	Ser	Lys	Leu	Asp	Leu	Thr	Ala	Phe	Glu	Phe	Phe	Ser
1				5					10					15	
Asp	Lys	Ala	Leu	Ala	Lys	Val	Met	Gly	Arg	Gly	Asp	Val	Pro	Ala	Pro
			20					25					30		
Phe	Glu	Thr	Glu	Cys	Pro	Phe	Tyr	Ala	Leu	Leu	Glu	Phe	Glu	Ala	Thr
		35					40					45			
Thr	Glu	Glu	Val	Ala	Asn	His	Ala	Leu	Glu	Thr	Phe	Glu	His	Cys	Val
		50				55					60				
Glu	Gln	Gly	Trp	Val	Leu	Asp	Gly	Val	Met	Ser	Gln	Ser	Glu	Thr	Gln
65					70				75					80	
Leu	His	Asn	Leu	Trp	Lys	Leu	Arg	Glu	Tyr	Ile	Ser	Glu	Thr	Ile	Ser
				85				90						95	
His	Trp	Thr	Pro	Tyr	Lys	Asn	Asp	Ile	Ser	Val	Thr	Val	Ser	Lys	Val
			100					105					110		
Pro	Ala	Phe	Leu	Lys	Glu	Ile	Asp	Ala	Ile	Val	Val	Ser	Ile	Thr	Arg

115                                      120                                      125  
 Thr Ser Lys Leu Leu Val Gly His Ile Gly Asp Ala  
 130                                      135                                      140

<210> 1465  
 <211> 424  
 <212> DNA  
 <213> Homo sapiens

<400> 1465  
 gtgcacggtc tttgagctgc aattcccagg aatcaggggc cataggcggg agatggcatg  
 60  
 cagcctctcg ggcgggaaag tggctctacag tgccctgcttg cccgggcagg cagctcgtag  
 120  
 gcttatatgc ttagtggtta tggccctac cactgttttt gaccgcgcta ccattcgcca  
 180  
 caacctcacc gaattcaaac tccgggtggat ttcccacgcc gagcagtgga aggcggaaaa  
 240  
 ccgtcctgca acagagtcta aagccgctga gacggactgc tcagtacatg gggatctctg  
 300  
 gaccttggcc acggaagttt tcgggtcaagc acccgaattc gacttcccat atatgaaact  
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 420  
 cacg  
 424

<210> 1466  
 <211> 124  
 <212> PRT  
 <213> Homo sapiens

<400> 1466  
 Met Ala Cys Ser Leu Ser Gly Gly Lys Val Val Tyr Ser Ala Cys Leu  
 1                                      5                                      10                                      15  
 Pro Gly Gln Ala Ala Arg Arg Leu Ile Cys Leu Val Val Met Ala Pro  
 20                                      25                                      30  
 Thr Thr Val Phe Asp Arg Ala Thr Ile Arg His Asn Leu Thr Glu Phe  
 35                                      40                                      45  
 Lys Leu Arg Trp Ile Ser His Ala Glu Gln Trp Lys Ala Glu Asn Arg  
 50                                      55                                      60  
 Pro Ala Thr Glu Ser Lys Ala Ala Glu Thr Asp Cys Ser Val His Gly  
 65                                      70                                      75                                      80  
 Asp Leu Trp Thr Leu Ala Thr Glu Val Phe Gly Gln Ala Pro Glu Phe  
 85                                      90                                      95  
 Asp Phe Pro Tyr Met Lys Leu Thr Arg Gln Glu Cys Arg Phe Leu Phe  
 100                                      105                                      110  
 Leu Pro Arg Asn Asp Ile Ser Leu Ser Cys Phe Thr  
 115                                      120

<210> 1467  
 <211> 441  
 <212> DNA  
 <213> Homo sapiens



&lt;400&gt; 1467

nacgcgtgac ggcgaaatgag cggcggaggc atgacaacga gcgcaccgtt ccgcagcttg  
 60  
 gtgccgtgca tcatggctca agtgccgcgc aactttcggc tgctcgagga gctggagaaa  
 120  
 ggcgaaaagg ggctaggaaa tggctcgtgc tcttacggcc ttgcgaacag tgatgacatt  
 180  
 cgtacgtatg cgctgtgct gatggtcgtg acaacgtgga atgccacgat cctaggcccg  
 240  
 gccaaactcg tgcatgagaa ccgcatatac tgctgcgcgc tcgtgtgtgg cgactcgtac  
 300  
 cctcttgtgc cgctgagat ttggttccag acgcgcatca acttgccgtg cgtcgatgcc  
 360  
 cacacggggc gcgtcatgcc cgatcagttc tcgcccctct tgcattggcg tgatgagtac  
 420  
 actatggaaa gctgctgcat g  
 441

&lt;210&gt; 1468

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1468

Met	Ala	Gln	Val	Pro	Arg	Asn	Phe	Arg	Leu	Leu	Glu	Glu	Leu	Glu	Lys
1				5					10					15	
Gly	Glu	Lys	Gly	Leu	Gly	Asn	Gly	Ser	Cys	Ser	Tyr	Gly	Leu	Ala	Asn
			20					25					30		
Ser	Asp	Asp	Ile	Arg	Thr	Tyr	Ala	Pro	Val	Leu	Met	Val	Met	Thr	Thr
			35				40					45			
Trp	Asn	Ala	Thr	Ile	Leu	Gly	Pro	Ala	Asn	Ser	Val	His	Glu	Asn	Arg
	50					55					60				
Ile	Tyr	Cys	Leu	Arg	Leu	Val	Cys	Gly	Asp	Ser	Tyr	Pro	Leu	Val	Pro
65				70					75				80		
Pro	Glu	Ile	Trp	Phe	Gln	Thr	Arg	Ile	Asn	Leu	Pro	Cys	Val	Asp	Ala
				85				90					95		
His	Thr	Gly	Arg	Val	Met	Pro	Asp	Gln	Phe	Ser	Pro	Leu	Leu	His	Trp
			100					105					110		
Arg	Asp	Glu	Tyr	Thr	Met	Glu	Ser	Cys	Cys	Met					
		115						120							

&lt;210&gt; 1469

&lt;211&gt; 468

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1469

nngctcgatc tagtctatgg gctaaatgat cgaccgaacc cttttattgc ttttttagcg  
 60  
 gcgcttcaac atcttttagc gatttttagtg ccaattgtca ccnctggatt attgatttgt  
 120  
 ttggcattag gcgtgtctcg cgaagacacc aatatgattc tttctatgtc attaattatt  
 180

tcagggatcg cgacttttctt gcaatgtaaa aaagttggtc catttggcgc tggattactt  
 240  
 attgttcaag gaactagctt taatttcatt ggtcctatca ttggtatagg tagctcaatg  
 300  
 gtggctgctg gcacacctgt cgaacaagtt atggctgcga tttttggtgt cgtaatcgca  
 360  
 ggttcattta tcgaaatggg cgtatctcaa attttacctt gggtaaaaaa gctgattact  
 420  
 cctctcgta caggaatcgt cgttctgttg attggtctac cattaatg  
 468

<210> 1470

<211> 156

<212> PRT

<213> Homo sapiens

<400> 1470

Xaa	Leu	Asp	Leu	Val	Tyr	Gly	Leu	Asn	Asp	Arg	Pro	Asn	Pro	Phe	Ile
1				5					10					15	
Ala	Phe	Leu	Ala	Ala	Leu	Gln	His	Leu	Leu	Ala	Ile	Leu	Val	Pro	Ile
			20					25					30		
Val	Thr	Xaa	Gly	Leu	Leu	Ile	Cys	Leu	Ala	Leu	Gly	Val	Ser	Arg	Glu
		35					40					45			
Asp	Thr	Asn	Met	Ile	Leu	Ser	Met	Ser	Leu	Ile	Ile	Ser	Gly	Ile	Ala
		50				55					60				
Thr	Phe	Leu	Gln	Cys	Lys	Lys	Val	Gly	Pro	Phe	Gly	Ala	Gly	Leu	Leu
65					70					75				80	
Ile	Val	Gln	Gly	Thr	Ser	Phe	Asn	Phe	Ile	Gly	Pro	Ile	Ile	Gly	Ile
				85					90					95	
Gly	Ser	Ser	Met	Val	Ala	Ala	Gly	Thr	Pro	Val	Glu	Gln	Val	Met	Ala
			100					105					110		
Ala	Ile	Phe	Gly	Val	Val	Ile	Ala	Gly	Ser	Phe	Ile	Glu	Met	Gly	Val
		115					120					125			
Ser	Gln	Ile	Leu	Pro	Trp	Val	Lys	Lys	Leu	Ile	Thr	Pro	Leu	Val	Thr
	130					135					140				
Gly	Ile	Val	Val	Leu	Leu	Ile	Gly	Leu	Pro	Leu	Met				
145					150					155					

<210> 1471

<211> 341

<212> DNA

<213> Homo sapiens

<400> 1471

gcgtggatgg ggatcctgaa aaacaatggc gtgctgaata acttcttgct gtggctcggc  
 60  
 gttatcgatc agccgctgac gattttgcac accaatctgg cggtgtatat cggcattgtg  
 120  
 tacgcttata tgccgtttat ggtactgccc atttatacgg cgctgacgcg cattgattac  
 180  
 tcgctgggtg aggctcact ggatctcggg gcccgcccgc tgaaaacgtt tttcaatgtg  
 240  
 attgtcccgc tcaccaaagg cggcattatc gcggggtcga tgctgggtgt tatccccggc  
 300

gtcgggtgagt ttgttatccc ggaactgctc ggcgggcgcc g  
341

<210> 1472

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1472

Ala	Trp	Met	Gly	Ile	Leu	Lys	Asn	Asn	Gly	Val	Leu	Asn	Asn	Phe	Leu
1				5					10					15	
Leu	Trp	Leu	Gly	Val	Ile	Asp	Gln	Pro	Leu	Thr	Ile	Leu	His	Thr	Asn
			20					25					30		
Leu	Ala	Val	Tyr	Ile	Gly	Ile	Val	Tyr	Ala	Tyr	Leu	Pro	Phe	Met	Val
			35				40					45			
Leu	Pro	Ile	Tyr	Thr	Ala	Leu	Thr	Arg	Ile	Asp	Tyr	Ser	Leu	Val	Glu
			50				55				60				
Ala	Ser	Leu	Asp	Leu	Gly	Ala	Arg	Pro	Leu	Lys	Thr	Phe	Phe	Asn	Val
65					70					75				80	
Ile	Val	Pro	Leu	Thr	Lys	Gly	Gly	Ile	Ile	Ala	Gly	Ser	Met	Leu	Val
				85					90					95	
Phe	Ile	Pro	Ala	Val	Gly	Glu	Phe	Val	Ile	Pro	Glu	Leu	Leu	Gly	Gly
			100					105						110	

Gly

<210> 1473

<211> 352

<212> DNA

<213> Homo sapiens

<400> 1473

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60  
gaaactgacg gaaatgttca aactccagtt tgttgtaaag cagatcacta aacttaaaat  
120  
gcttgtattc tgcaggaaca ttatcccaat attctgttcg tttagagacg ttagagagtg  
180  
ataaaaatgcc agttccaatt tcacaagtgg tgcctcagc tttcttgga aatgtctctt  
240  
tatgcaaagc ctgtagcttt ctgaagtatg tggagtctaa ctgtcgagtt tcttccacca  
300  
gtccacctt tttataagca atttgggtccg attttacat ctttgtccat gg  
352

<210> 1474

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1474

Met	Val	Lys	Ser	Asp	Gln	Ile	Ala	Tyr	Lys	Lys	Val	Glu	Leu	Val	Glu
1					5				10					15	
Glu	Thr	Arg	Gln	Leu	Asp	Ser	Thr	Tyr	Phe	Arg	Lys	Leu	Gln	Ala	Leu

	20		25		30										
His	Lys	Glu	Thr	Phe	Ser	Lys	Lys	Ala	Glu	Asp	Thr	Thr	Cys	Glu	Ile
	35						40					45			
Gly	Thr	Gly	Ile	Leu	Ser	Leu	Ser	Asn	Val	Ser	Lys	Arg	Thr	Glu	Tyr
	50					55					60				
Trp	Asp	Asn	Val	Pro	Ala	Glu	Tyr	Lys	His	Phe	Lys	Phe	Ser	Asp	Leu
65					70					75				80	
Leu	Asn	Asn	Lys	Leu	Glu	Phe	Glu	His	Phe	Arg	Gln	Phe	Leu	Glu	Thr
			85						90					95	
His	Ser	Ser	Ser	Met	Asp	Leu	Met	Cys	Trp	Thr	Asp	Ile	Glu	Gln	Phe
			100					105					110		

Arg

<210> 1475  
 <211> 389  
 <212> DNA  
 <213> Homo sapiens

<400> 1475  
 accggtgccg gagccgatct ccacgatggt cttggcgccg gtgcggccga accactcatc  
 60  
 gacatcgata agctcatcgc ttaagacgcg gccagctcg ggccagcatt gctcaaaaag  
 120  
 ctggtgctgg ttgtccgtga gcgtgccgcg ggggaaaggg acctttgccc aggcgcgggt  
 180  
 agtccaggtc attatcaaag accgcattga agtccgtttg cggcggggcga cccggcgggca  
 240  
 tttctccggc aggggggtgtt ttgagaatta tccgtgctat acatcgcgcc ctatttttcc  
 300  
 ctgtccaggc atggcaagca atatgccgcg ccgggtatatt tccccgccgt atggggaggg  
 360  
 ggataaccgg agcttgacgg ggtggtgtc  
 389

<210> 1476  
 <211> 121  
 <212> PRT  
 <213> Homo sapiens

<400> 1476  
 Met Val Leu Ala Pro Val Arg Pro Asn His Ser Ser Thr Ser Ile Ser  
 1 5 10 15  
 Ser Ser Leu Lys Thr Arg Pro Ser Ser Gly Gln His Cys Ser Lys Ser  
 20 25 30  
 Trp Cys Trp Leu Ser Val Ser Val Pro Arg Gly Lys Gly Thr Phe Ala  
 35 40 45  
 Gln Ala Arg Val Val Gln Val Ile Ile Lys Asp Arg Ile Glu Val Arg  
 50 55 60  
 Leu Arg Arg Ala Thr Arg Arg His Phe Ser Gly Arg Gly Cys Phe Glu  
 65 70 75 80  
 Asn Tyr Pro Cys Tyr Thr Ser Arg Pro Ile Phe Pro Cys Pro Gly Met  
 85 90 95  
 Ala Ser Asn Met Pro Arg Arg Val Phe Ser Pro Pro Tyr Gly Glu Gly

100 105 110  
 Asp Asn Arg Ser Leu Thr Gly Trp Cys  
 115 120

<210> 1477  
 <211> 500  
 <212> DNA  
 <213> Homo sapiens

<400> 1477  
 tacagcgaga atctgcacga taccacttc ctcaaacct attgcgttg cttcgagcaa  
 60  
 ttcttccctt atttgctggg ccaaacggac ggccaaccta aagatgccca atgggcatcg  
 120  
 gcgctgtgtg gtattgatgc cgaaatcatc cgggcactgg cccgccaaat ggcggccaac  
 180  
 cgtacgcaaa tcattgcggg ctggtgctg caacgtatgc aacacggcga acaatgggcg  
 240  
 tggatgacgg tagtgctggc ggcgatgctt ggccaaatcg gcttaccggg cggcgggttc  
 300  
 ggttttgggtt ggccctccaa cggcgcaggt acccccgagc cgcaaggggt gatcctgagc  
 360  
 ggttttctccg gttccccgcg tacgccggca cgccatgcc aaggggattt caaagggttac  
 420  
 agcagtacca ttccgatcgc gcgctttatc gatgccatgc tggagccggg caaggagatc  
 480  
 gattggaatg gcaaacgcgt  
 500

<210> 1478  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1478  
 Tyr Ser Glu Asn Leu His Asp Thr His Phe Leu Lys Thr Tyr Cys Val  
 1 5 10 15  
 Gly Phe Glu Gln Phe Leu Pro Tyr Leu Leu Gly Gln Thr Asp Gly Gln  
 20 25 30  
 Pro Lys Asp Ala Gln Trp Ala Ser Ala Leu Cys Gly Ile Asp Ala Glu  
 35 40 45  
 Ile Ile Arg Ala Leu Ala Arg Gln Met Ala Ala Asn Arg Thr Gln Ile  
 50 55 60  
 Ile Ala Gly Trp Cys Val Gln Arg Met Gln His Gly Glu Gln Trp Ala  
 65 70 75 80  
 Trp Met Thr Val Val Leu Ala Ala Met Leu Gly Gln Ile Gly Leu Pro  
 85 90 95  
 Gly Gly Gly Phe Gly Phe Gly Trp Pro Ser Asn Gly Ala Gly Thr Pro  
 100 105 110  
 Glu Pro Gln Gly Val Ile Leu Ser Gly Phe Ser Gly Ser Pro Ala Thr  
 115 120 125  
 Pro Ala Arg His Ala Lys Gly Asp Phe Lys Gly Tyr Ser Ser Thr Ile  
 130 135 140  
 Pro Ile Ala Arg Phe Ile Asp Ala Met Leu Glu Pro Gly Lys Glu Ile

```

145                      150                      155                      160
Asp Trp Asn Gly Lys Arg
                      165

<210> 1479
<211> 421
<212> DNA
<213> Homo sapiens

<400> 1479
acgcgtgttg agctggcacc atgaaagcac gatgtgcatc actcatagag gcaggcacac
60
ttaagtatgt tctttacatt gaaacagaaa ggaaagaaga taggaaaaaat ggtgccagca
120
cgctgggctt tttttgtttg ctgttttggg tgggggtgtgc tagtgcaagtg tccgggtgtac
180
gcttttgtcc tcaaacaggc ttgttccccg gtcagagttt cattattggt gctggtaaac
240
aaatgccaaag tttgacaaaa aacagtgaag taaagcaaaa gattttgaaa aatgcttcac
300
catgtcagaa ggaaagaacc cttttcacgg gtgcctgccc acatttcctt gccagcctg
360
agaccctatt gactttgaat tatcttttgc tgttttatct ctatgaaaaat tatatacgcg
420
t
421

<210> 1480
<211> 133
<212> PRT
<213> Homo sapiens

<400> 1480
Met Lys Ala Arg Cys Ala Ser Leu Ile Glu Ala Gly Thr Leu Lys Tyr
 1          5          10          15
Val Leu Tyr Ile Glu Thr Glu Arg Lys Glu Asp Arg Lys Asn Gly Ala
          20          25          30
Ser Thr Leu Gly Phe Phe Cys Leu Leu Phe Trp Val Gly Cys Ala Ser
          35          40          45
Ala Val Ser Gly Val Arg Phe Cys Pro Gln Thr Gly Leu Phe Pro Gly
          50          55          60
Gln Ser Phe Ile Ile Val Ala Gly Lys Gln Met Pro Ser Leu Thr Lys
65          70          75          80
Asn Ser Glu Ile Lys Gln Lys Ile Leu Lys Asn Ala Ser Ser Cys Gln
          85          90          95
Lys Glu Arg Thr Leu Phe Thr Gly Ala Cys Pro His Phe Leu Ala Gln
          100          105          110
Pro Glu Thr Leu Leu Thr Leu Asn Tyr Leu Leu Leu Phe Tyr Phe Tyr
          115          120          125
Glu Asn Tyr Ile Arg
130

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```
<210> 1481
<211> 545
```

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1481

```

gtcgggtcgc cgcccagtct cgtgccgaca tgcagttcct ggcccgggag gtcgcatcca
60
tccggatgca gatgggagag ttggccacgc gcgattattt gcgctcggag ctacgcgacg
120
agttgcgctc cctgctcgag gagatcgagg cctcaccggc ctcccactaa ctgaccgggt
180
tcgcgacgag cgagttgtcg catcggggcca acggtgtgta gacaagtcag catgagcacc
240
gagaaccagc tggttaaggc cattgccgat gcggtgtcgc acgtcaatga ccccgagatc
300
aaacgccccca ttaccgatct caacatgatt gatgagatta ccgtcgacga gcaaggacgc
360
gctttcgtcc gcacccctgct gaccgtcgcc ggggtgtccc tcaagaccga gctgcgtgag
420
caggccaccg aggctgtgcg cagcgttgac ggggtgacca gtgtttccgt cgaactcggc
480
accatgaccg acgaacagcg cgatgctctc aaagttcagc tgcgcggtga cgtccccgaa
540
cgcgt
545

```

&lt;210&gt; 1482

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1482

```

Met Ser Thr Glu Asn Pro Val Val Lys Ala Ile Ala Asp Ala Leu Ser
1          5          10          15
His Val Asn Asp Pro Glu Ile Lys Arg Pro Ile Thr Asp Leu Asn Met
20          25          30
Ile Asp Glu Ile Thr Val Asp Glu Gln Gly Arg Ala Phe Val Arg Ile
35          40          45
Leu Leu Thr Val Ala Gly Cys Pro Leu Lys Thr Glu Leu Arg Glu Gln
50          55          60
Ala Thr Glu Ala Val Arg Ser Val Asp Gly Val Thr Ser Val Ser Val
65          70          75          80
Glu Leu Gly Thr Met Thr Asp Glu Gln Arg Asp Ala Leu Lys Val Gln
85          90          95
Leu Arg Gly Asp Val Pro Glu Arg
100

```

&lt;210&gt; 1483

&lt;211&gt; 625

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1483

```

gtacggcttc gagagggcta cagtgtccga gaggtcacac tggccaaagg aggggtcccaa
60

```

ttggaggttaa agctgggtgct gctgtggaaa cacaacatgc gcattgagta tgtggctatg  
 120  
 gcatactggc ccttggagcc tgagggccct cgagtaacac ggggtggaagt gacgatggaa  
 180  
 ggcggctacg acattttgca tgatgtgtcc tgtgcactaa ggcagcccat tcgttcattg  
 240  
 tategtaccc atgttatccg gcgtttctgg aacacgctgc agagcatcaa ccagacagac  
 300  
 cagatgcttg cccaccttca gtccttctcc tcagtgcctg agcatttcac gcttctgac  
 360  
 agcaccaaga gcggagtgcc actcttctac atccctccag gctccaccac cccgggtgctc  
 420  
 tccctccagc ccagtgggtc tgactcatcc catgcccagt ttgctgcta ctggaagccc  
 480  
 agtgctgtcc atggatgcaa attcctggca gcgatggctg cacatgcac gcctgggtgct  
 540  
 aatcctggag catgacacac caatcccaa gcacttgac accccgggca gcaatgggag  
 600  
 ctactacgga gagaagacaa cgcgt  
 625

<210> 1484

<211> 184

<212> PRT

<213> Homo sapiens

<400> 1484

Val	Arg	Leu	Arg	Glu	Gly	Tyr	Ser	Val	Arg	Glu	Val	Thr	Leu	Ala	Lys
1				5				10						15	
Gly	Gly	Ser	Gln	Leu	Glu	Val	Lys	Leu	Val	Leu	Leu	Trp	Lys	His	Asn
			20					25					30		
Met	Arg	Ile	Glu	Tyr	Val	Ala	Met	Ala	Ser	Trp	Pro	Leu	Glu	Pro	Glu
		35					40					45			
Gly	Pro	Arg	Val	Thr	Arg	Val	Glu	Val	Thr	Met	Glu	Gly	Gly	Tyr	Asp
	50					55				60					
Ile	Leu	His	Asp	Val	Ser	Cys	Ala	Leu	Arg	Gln	Pro	Ile	Arg	Ser	Leu
65					70				75					80	
Tyr	Arg	Thr	His	Val	Ile	Arg	Arg	Phe	Trp	Asn	Thr	Leu	Gln	Ser	Ile
			85					90					95		
Asn	Gln	Thr	Asp	Gln	Met	Leu	Ala	His	Leu	Gln	Ser	Phe	Ser	Ser	Val
			100				105						110		
Pro	Glu	His	Phe	Thr	Leu	Pro	Asp	Ser	Thr	Lys	Ser	Gly	Val	Pro	Leu
		115					120					125			
Phe	Tyr	Ile	Pro	Pro	Gly	Ser	Thr	Thr	Pro	Val	Leu	Ser	Leu	Gln	Pro
	130				135				140						
Ser	Gly	Ser	Asp	Ser	Ser	His	Ala	Gln	Phe	Ala	Ala	Tyr	Trp	Lys	Pro
145					150				155					160	
Ser	Ala	Val	His	Gly	Cys	Lys	Phe	Leu	Ala	Ala	Met	Ala	Ala	His	Ala
			165					170						175	
Ser	Pro	Gly	Ala	Asn	Pro	Gly	Ala								
			180												

<210> 1485

<211> 2058



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1485

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ntatgttcag cgttcaacga tattggctac cactatgggtg ccatgggtcgt cgatgctgcg
60
ctgttcctgc cacagtcacg acccagacta tttatcattg gtgtcagaaa cgatattttt
120
gttggcgata ttactttctga atcacctctt aaaatgtggc ataccagaac tttattgaat
180
gcctacagca atctgaaaga tgatgccaaag tccaattggg tatgggtggga ccttcctatg
240
ccagcccaga gaaaatctgc tttcgccgat ttgattgaag aaaatcctag cagcgttaag
300
tggcataccc ggaaggaaac acagcagctc ttggatatga tgactgatgt taacttagct
360
aaggttgagg ctgcaaaaaa gctatcgatc gagtctaagg aaaatgttgt agggacaatt
420
tataaaagaa ctgcgaccga tagcttttga gttaaagcgc agcgtgctga agtgcggttt
480
gatgatgttg ccggttgtct tcgcacccct ggaggggggt caagtcggca agtcataatg
540
gtcgttgata acgggactgt aaaaacgagg ttgatctcaa gtagagaaac tgcaaggctt
600
atgggggttac ccgacgaata catattgcc aaaaattata atgaggcgta tcacttaacg
660
ggtgatgggt ttgtagtgcc ggttgtatcc cacatagcca ctcatatttt tgaccagtg
720
atggagcgtg tgtttgagga tgcggcgga ctgcttaagc aaatcgcata gcatcgtttt
780
ggcaggaaga tatgagcgtt attccgtgta aaaaggacct tcagctaaaa aaattgattg
840
aatcctatgc agaagccttg aaagttgagg ccataagct aggagagcat ggattaactg
900
aagctgaatt ttatgatagc ggcctctttc ggggggctat cgagcgaatt cgaggacagt
960
tctccgcgac catgcgggag aaaagaaatt tcgttaagca tgttttaaat tacatgcagg
1020
ataacgacta cattgctgat tgggagtcgg ctggtgaatc gaatcgccat gattatatgg
1080
taactctcaa ttctgggagc aaagctgcta ttgagctgaa aggggtgcctt gatggcaata
1140
aactaacaat ctttgatcgc cccctcagg cagaagaatt tgttatctgg agtgtatgca
1200
caaatcctgg tgctgaccct cagcataatg tttggtctgg gcttcacacc agactaagtg
1260
ctgaaatcat ttcacgggag caaaggattg atggaatggt catttgggac tgggcttgtg
1320
gaacagtcgg aaggccatgc ccaaaaatag caactgaacc tgagcgggct gtaacatttg
1380
ggccgttcaa attgccgcca ccatgtttgt atcttttacc ttcgacgatt ccaagcccaa
1440
gaaacaaccc gtctccaaga gctcagcaga ttgaagacgt gcagctaatc aaagcgtttc
1500
```

```

acgattgttt tgggtgccgg tctgaagaag ttaatttcgt taactttgat gttgggtatc
1560
atggtaaaga taccgtccgt aaaacgacta tcattcgaaa cggcatgggtg gagcgtgaat
1620
cggaaatgac ggcaataagg cggctcttaat ttgtgcatgc ctatgctgca tgaatccgca
1680
tgatcgtttg aggatcgttt ttgctgagggc ccgccagttc tgggtgggctt ttgcttatgt
1740
catgcacctg catgaaaacc gctacataaa gcgggcaggc gtggcgggga tacgagcgcg
1800
cgcaacgggg tgaaatgggtg aatatcaggg gcaatctccg gcacgctggc ggcttgaatc
1860
gggtaggggtg agtgagaggc agcaataaag aagcgccccg cagaatgctg ctggggcgct
1920
gtgagagggtg gtcttgttgt cgcggtgcgg tgggtcagtc gtagcgattg tcttctgtca
1980
gccccagcgt gtacggctca aagcggatca cttcttcgcc cagccagtca ttaagctccc
2040
gcagtcgctt ctgcaggc
2058

```

&lt;210&gt; 1486

&lt;211&gt; 256

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1486

```

Xaa Cys Ser Ala Phe Asn Asp Ile Gly Tyr His Tyr Gly Ala Met Val
  1           5           10          15
Val Asp Ala Ala Leu Phe Leu Pro Gln Ser Arg Pro Arg Leu Phe Ile
          20          25          30
Ile Gly Val Arg Asn Asp Ile Phe Val Gly Asp Ile Thr Ser Glu Ser
          35          40          45
Pro Ser Lys Met Trp His Thr Arg Thr Leu Leu Asn Ala Tyr Ser Asn
          50          55          60
Leu Lys Asp Asp Ala Lys Ser Asn Trp Val Trp Trp Asp Leu Pro Met
        65          70          75          80
Pro Ala Gln Arg Lys Ser Ala Phe Ala Asp Leu Ile Glu Glu Asn Pro
          85          90          95
Ser Ser Val Lys Trp His Thr Arg Lys Glu Thr Gln Gln Leu Leu Asp
          100         105         110
Met Met Thr Asp Val Asn Leu Ala Lys Val Glu Ala Ala Lys Lys Leu
          115         120         125
Ser Ile Glu Ser Lys Glu Asn Val Val Gly Thr Ile Tyr Lys Arg Thr
          130         135         140
Arg Thr Asp Ser Phe Gly Val Lys Ala Gln Arg Ala Glu Val Arg Phe
        145         150         155         160
Asp Asp Val Ala Gly Cys Leu Arg Thr Pro Gly Gly Gly Ser Ser Arg
          165         170         175
Gln Val Ile Met Val Val Asp Asn Gly Thr Val Lys Thr Arg Leu Ile
          180         185         190
Ser Ser Arg Glu Thr Ala Arg Leu Met Gly Leu Pro Asp Glu Tyr Ile
          195         200         205
Leu Pro Lys Asn Tyr Asn Glu Ala Tyr His Leu Thr Gly Asp Gly Val

```

210	215	220
Val Val Pro Val Val Ser His Ile Ala Thr His Ile Phe Asp Pro Val		
225	230	235
Met Glu Arg Val Phe Glu Asp Ala Ala Gly Leu Leu Lys Gln Ile Ala		240
	245	250
		255

&lt;210&gt; 1487

&lt;211&gt; 823

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1487

```

acgcgtgagg ggaggggatg ctgggcagat cttgtgaggg aaaattcagg aaggacctct
60
ccgagcaggt gacatttcag ctaaggctgg gaaggatgag gagaagtcag gaactccagg
120
catcagggaa tgctggggaa aaaaagcact ccaggcccag ggatcagcaa agcacaggat
180
gcctggggga acacacagcc tcagagcatt tgaggaacag aaaaggcaac gtgactaagc
240
ttcctggggc ggtgaggtca ggcagggagg tgggtgagag gtcagggggc cgcaggcaaa
300
cgccctccc tcccagtgcc ccacatgcag gccctggagc accaggagcg gggaggctcc
360
gtggtgtgtc ttcttgcaag tggcctgcct ttgggagcat cagccctttc tctgggggac
420
tgggagaggg cggcagttag ggaagaatgg ccctcggtcg tgcgtagaga atgtagggga
480
cacagggcct ctcacggacc cagatcctga tcttgtcaga tctgcacgcc cgtgggaggg
540
tgctggcggc agaaacgcgt tgccataagc cttctcccca ctgcaggcag gtgtgggtcag
600
gggacctcct tggagaacaa ggtgggggaa tttggcagct ttctcagcat ggcgtccatc
660
ccccctacat tcttggggca ccactgtag gccaggccct gtgccggatc tgatgataca
720
gtgatgacta agtcacagtc cctgcctctg agggccccc atgatgtgccg gacagccaag
780
caacccaata tgttaaaatc cagtgtcagg acccnaggag aag
823

```

&lt;210&gt; 1488

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1488

Met Leu Gly Arg Ser Cys Glu Gly Lys Phe Arg Lys Asp Leu Ser Glu	
1	5
Gln Val Thr Phe Gln Leu Arg Leu Gly Arg Met Arg Arg Ser Gln Glu	
	20
Leu Gln Ala Ser Gly Asn Ala Gly Glu Lys Lys His Ser Arg Pro Arg	
	35
Asp Gln Gln Ser Thr Gly Cys Leu Gly Glu His Thr Ala Ser Glu His	
	40
	45

```

      50              55              60
Leu Arg Asn Arg Lys Gly Asn Val Thr Lys Leu Pro Gly Ala Val Arg
65              70              75              80
Ser Gly Arg Glu Val Gly Ala Arg Ser Trp Gly Arg Arg Gln Thr Ala
      85              90              95
Leu Pro Pro Ser Ala Pro His Ala Gly Pro Gly Ala Pro Gly Ala Gly
      100              105              110
Arg Leu Arg Gly Val Ser Ser Cys Lys Trp Pro Ala Phe Gly Ser Ile
      115              120              125
Ser Pro Phe Ser Trp Gly Leu Gly Glu Ala Gly Ser Glu Gly Arg Met
      130              135              140
Ala Leu Gly Arg Ala
145

```

&lt;210&gt; 1489

&lt;211&gt; 342

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1489

```

nnccagttca ccgtcaagct ggccgcggcc ggcgaacaca atgtgcgcaa tgcgctggcc
60
gcgattgcct gcgccgtggg tgccggcatc aaccaggacg ccacgtgcg cgccctcgaa
120
gccttcgccc cggtcggcgg acgtttgcag cgcaagcagg ccgccagcgg cgcgcccgtc
180
attgacgaca cccacaaccc caatcccaat tcaatgcgcc cggcgatcga cgtgctggcc
240
cgcgtagccg cgccgcgcat cctgggtggtg ggcgacatgg gcgaagtcgg cgcacaggga
300
aaagaatttc acgaagaaat cggggccttac gcacacacgc gt
342

```

&lt;210&gt; 1490

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1490

```

Xaa Gln Phe Thr Val Lys Leu Ala Ala Ala Gly Glu His Asn Val Arg
1      5      10      15
Asn Ala Leu Ala Ala Ile Ala Cys Ala Val Gly Ala Gly Ile Asn Gln
      20      25      30
Asp Ala Ile Val Arg Gly Leu Glu Ala Phe Ala Pro Val Gly Gly Arg
      35      40      45
Leu Gln Arg Lys Gln Ala Ala Ser Gly Ala Pro Val Ile Asp Asp Thr
      50      55      60
His Asn Pro Asn Pro Asn Ser Met Arg Pro Ala Ile Asp Val Leu Ala
65      70      75      80
Arg Val Pro Ala Pro Arg Ile Leu Val Val Gly Asp Met Gly Glu Val
      85      90      95
Gly Ala Gln Gly Lys Glu Phe His Glu Glu Ile Gly Ala Tyr Ala His
      100      105      110
Thr Arg

```

<210> 1491  
 <211> 333  
 <212> DNA  
 <213> Homo sapiens

<400> 1491  
 ncctcgttgt tctcatagag ggctacggca tcgcgtttga actgttcgga gtacctggac  
 60  
 atgggggtag attacctttc ttcccagctc gactgggctg gatatcaggt gtccaccaca  
 120  
 tgggggtcag gtcccactcc caaaggagta gccatcacc acgagtcggc ggtcaatacg  
 180  
 attgtcgatg tcaacgaacg cctcgggggtg actccgaccg accggatatt ggggatttca  
 240  
 gagctaaact tcgatctatc ggtatacgac atcttcggga tgttcgcgcg ggggtgctacc  
 300  
 ttggtgttgc catctccagc agacaaacgt gat  
 333

<210> 1492  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

<400> 1492  
 Met Gly Val Asp Tyr Leu Ser Ser Gln Leu Asp Trp Ala Gly Tyr Gln  
 1 5 10 15  
 Val Ser Thr Thr Trp Gly Ser Gly Pro Thr Pro Lys Gly Val Ala Ile  
 20 25 30  
 Thr His Glu Ser Ala Val Asn Thr Ile Val Asp Val Asn Glu Arg Leu  
 35 40 45  
 Gly Val Thr Pro Thr Asp Arg Ile Leu Gly Ile Ser Glu Leu Asn Phe  
 50 55 60  
 Asp Leu Ser Val Tyr Asp Ile Phe Gly Met Phe Ala Arg Gly Ala Thr  
 65 70 75 80  
 Leu Val Leu Pro Ser Pro Ala Asp Lys Arg Asp  
 85 90

<210> 1493  
 <211> 1316  
 <212> DNA  
 <213> Homo sapiens

<400> 1493  
 nggtaccagg gcaaagaagg ctgggcccc gcctcctacc taaagaagaa cagtggggag  
 60  
 cccttgcccc cgaagccagg ccctgggtca ccctcccacc cgggtgccct tgacttggat  
 120  
 ggtgtttccc ggcagcagaa cgcggtgggc agggagaagg agctgctcag cagccagagg  
 180  
 gacgggcggt ttgaaggccg cccggtgccc gacggtgacg ccaagcagag atcaccaaag  
 240

atgaggcaga gacccccctcc tcgccgggac atgaccattc ctcgaggcct caacctgccg  
 300  
 aagccgcccc tcccccccca agtggaggaa gagtattaca ccatcgccga attccagaca  
 360  
 accatcccag acggcatcag cttccaggca ggcctgaagg tcgagggtgat cgagaaaaac  
 420  
 ttgagtggct ggtggtacat tcagattgaa gataaggaag ggtgggcccc ggccaccttc  
 480  
 attgacaagt acaagaagac gagcaacgcg tcgagacca actttctggc tcccctgccc  
 540  
 cacgaggatga cccagctccg gctgggggaa gcagcagcgc tggagaacaa cacgggcagc  
 600  
 gaagccacgg gcccctcccc gcccctgcct gacgcaccgc atggtgtcat ggactcgggg  
 660  
 ttgccatggt ctaaagactg gaagggcagt aaggatgtcc tgaggaaggc atcttcagac  
 720  
 atgtctgcgt cagcaggcta cgaggagatc tcagaccccc acatggagga gaagcccagc  
 780  
 ctccctccgc ggaaagaatc catcatcaag tcggaggggg agctgctgga gcgggagcgg  
 840  
 gagcggcaga ggacggagca gctccggggc cccactccca agcctccggg cgtgattttg  
 900  
 ccgatgatgc cagccaaaca catccctcca gcccgggaca gcaggaggcc agagcccaaa  
 960  
 cctgacaaaa gcagactgtt ccagctgaaa aatgacatgg ggctggagtg tggccacaag  
 1020  
 gtcttggcca aggaagtga gaagcccaac ctccggccca tctccaaatc caaaactgac  
 1080  
 ctgccagagg agaagccaga tgccactccc cagaatccct tcttgaagtc cagacctcag  
 1140  
 gttaggccaa aaccagctcc ttccccaaa acggagccac ctcagggcga agaccaagtc  
 1200  
 gacatctgca acctcaggag taagctcagg cctgccaagt cccaagacaa gtccttgttg  
 1260  
 gatggggagg gccccaggc agtagggggc caagacgtgg ccttcagccg aagctt  
 1316

&lt;210&gt; 1494

&lt;211&gt; 438

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1494

Xaa	Tyr	Gln	Gly	Lys	Glu	Gly	Trp	Ala	Pro	Ala	Ser	Tyr	Leu	Lys	Lys
1				5				10						15	
Asn	Ser	Gly	Glu	Pro	Leu	Pro	Pro	Lys	Pro	Gly	Pro	Gly	Ser	Pro	Ser
			20					25					30		
His	Pro	Gly	Ala	Leu	Asp	Leu	Asp	Gly	Val	Ser	Arg	Gln	Gln	Asn	Ala
			35					40					45		
Val	Gly	Arg	Glu	Lys	Glu	Leu	Leu	Ser	Ser	Gln	Arg	Asp	Gly	Arg	Phe
			50					55				60			
Glu	Gly	Arg	Pro	Val	Pro	Asp	Gly	Asp	Ala	Lys	Gln	Arg	Ser	Pro	Lys
65					70					75				80	
Met	Arg	Gln	Arg	Pro	Pro	Pro	Arg	Arg	Asp	Met	Thr	Ile	Pro	Arg	Gly

85																90																95															
Leu	Asn	Leu	Pro	Lys	Pro	Pro	Ile	Pro	Pro	Gln	Val	Glu	Glu	Glu	Tyr																																
				100					105					110																																	
Tyr	Thr	Ile	Ala	Glu	Phe	Gln	Thr	Thr	Ile	Pro	Asp	Gly	Ile	Ser	Phe																																
				115					120					125																																	
Gln	Ala	Gly	Leu	Lys	Val	Glu	Val	Ile	Glu	Lys	Asn	Leu	Ser	Gly	Trp																																
				130					135					140																																	
Trp	Tyr	Ile	Gln	Ile	Glu	Asp	Lys	Glu	Gly	Trp	Ala	Pro	Ala	Thr	Phe																																
145					150					155					160																																
Ile	Asp	Lys	Tyr	Lys	Lys	Thr	Ser	Asn	Ala	Ser	Arg	Pro	Asn	Phe	Leu																																
				165					170					175																																	
Ala	Pro	Leu	Pro	His	Glu	Val	Thr	Gln	Leu	Arg	Leu	Gly	Glu	Ala	Ala																																
				180					185					190																																	
Ala	Leu	Glu	Asn	Asn	Thr	Gly	Ser	Glu	Ala	Thr	Gly	Pro	Ser	Arg	Pro																																
				195					200					205																																	
Leu	Pro	Asp	Ala	Pro	His	Gly	Val	Met	Asp	Ser	Gly	Leu	Pro	Trp	Ser																																
				210					215					220																																	
Lys	Asp	Trp	Lys	Gly	Ser	Lys	Asp	Val	Leu	Arg	Lys	Ala	Ser	Ser	Asp																																
225					230					235					240																																
Met	Ser	Ala	Ser	Ala	Gly	Tyr	Glu	Glu	Ile	Ser	Asp	Pro	Asp	Met	Glu																																
				245					250					255																																	
Glu	Lys	Pro	Ser	Leu	Pro	Pro	Arg	Lys	Glu	Ser	Ile	Ile	Lys	Ser	Glu																																
				260					265					270																																	
Gly	Glu	Leu	Leu	Glu	Arg	Glu	Arg	Glu	Arg	Gln	Arg	Thr	Glu	Gln	Leu																																
				275					280					285																																	
Arg	Gly	Pro	Thr	Pro	Lys	Pro	Pro	Gly	Val	Ile	Leu	Pro	Met	Met	Pro																																
				290					295					300																																	
Ala	Lys	His	Ile	Pro	Pro	Ala	Arg	Asp	Ser	Arg	Arg	Pro	Glu	Pro	Lys																																
305					310					315					320																																
Pro	Asp	Lys	Ser	Arg	Leu	Phe	Gln	Leu	Lys	Asn	Asp	Met	Gly	Leu	Glu																																
				325					330					335																																	
Cys	Gly	His	Lys	Val	Leu	Ala	Lys	Glu	Val	Lys	Lys	Pro	Asn	Leu	Arg																																
				340					345					350																																	
Pro	Ile	Ser	Lys	Ser	Lys	Thr	Asp	Leu	Pro	Glu	Glu	Lys	Pro	Asp	Ala																																
				355					360					365																																	
Thr	Pro	Gln	Asn	Pro	Phe	Leu	Lys	Ser	Arg	Pro	Gln	Val	Arg	Pro	Lys																																
				370					375					380																																	
Pro	Ala	Pro	Ser	Pro	Lys	Thr	Glu	Pro	Pro	Gln	Gly	Glu	Asp	Gln	Val																																
385					390					395					400																																
Asp	Ile	Cys	Asn	Leu	Arg	Ser	Lys	Leu	Arg	Pro	Ala	Lys	Ser	Gln	Asp																																
				405					410					415																																	
Lys	Ser	Leu	Leu	Asp	Gly	Glu	Gly	Pro	Gln	Ala	Val	Gly	Gly	Gln	Asp																																
				420					425					430																																	
Val	Ala	Phe	Ser	Arg	Ser																																										
				435																																											

<210> 1495

<211> 329

<212> DNA

<213> Homo sapiens

<400> 1495

agatctctgt cccgtagagg tgccacctca tcttccatga gagctgtgct ttgctttctt  
60

ctggaggctg caaggaggat ggcccccatc acggcgggacc tacatgctgg gagtccggga  
 120  
 gagggcaggg cgcgacatg gggcatgtgg cgatgtgttt caccacccac tcccgctga  
 180  
 agtgccactg tgagcccaac ccacggtgcc aggctggggt gcactccagg ctctgcagc  
 240  
 agaccacct cctcagcctc cttcccctga aggctgggca tggcctggac aaaggggtgc  
 300  
 ctctcttget gtgccatget gacgtggca  
 329

<210> 1496

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1496

Met	Ala	Gln	Gln	Arg	Arg	Thr	Pro	Phe	Val	Gln	Ala	Met	Pro	Ser	Leu
1				5					10					15	
Gln	Gly	Lys	Glu	Ala	Glu	Glu	Val	Gly	Leu	Leu	Gln	Glu	Pro	Gly	Val
			20					25					30		
Gln	Pro	Ser	Leu	Ala	Pro	Trp	Val	Gly	Leu	Thr	Val	Ala	Leu	Gln	Ala
		35					40					45			
Gly	Val	Gly	Gly	Glu	Thr	His	Arg	His	Met	Pro	His	Val	Arg	Gly	Leu
	50					55					60				
Pro	Ser	Pro	Gly	Leu	Pro	Ala	Cys	Arg	Ser	Ala	Val	Met	Gly	Ala	Ile
65					70					75				80	
Leu	Leu	Ala	Ala	Ser	Arg	Arg	Lys	Gln	Ser	Thr	Ala	Leu	Met	Glu	Asp
				85				90						95	
Glu	Val	Ala	Pro	Leu	Arg	Asp	Arg	Asp							
			100					105							

<210> 1497

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1497

naacttcttg cactcactca ggcgacgggt tggcgggcga cttggaagcc gctgcagcac  
 60  
 ttgacgcggg gcgatctcga agcggttcgggt cttggcctga cggtcgatgg ctgcggcgtg  
 120  
 ccgttgatcg cggaatgcg acgggtgggg cagggcgtgc ggccgacacc accgcaagaa  
 180  
 cgcaactcac ggcagatgaa tctgttttga aacgcaagga agggtaatga caggcaccga  
 240  
 caagaagcgg atccccgagc tgctgcgtgt tgagctcact gaacttaccg gcccgatcga  
 300  
 gcagccttac gcgcccgatg cagctcattc ttccggggcca cgcgt  
 345

<210> 1498

<211> 104

<212> PRT



<213> Homo sapiens

<400> 1498

```

Met Thr Cys Ile Gly Arg Val Arg Leu Leu Asp Arg Ala Gly Lys Phe
 1           5           10           15
Ser Glu Leu Asn Thr Gln Gln Leu Arg Asp Pro Leu Leu Val Gly Ala
      20           25           30
Cys His Tyr Pro Ser Leu Arg Phe Lys Thr Asp Ser Ser Ala Val Ser
      35           40           45
Cys Val Leu Ala Val Val Ser Ala Ala Arg Pro Ala Pro Pro Val Ala
      50           55           60
Phe Ala Arg Ser Thr Ala Arg Arg Ser His Arg Pro Ser Gly Gln Asp
65           70           75           80
Arg Thr Leu Arg Asp Arg Pro Ala Ser Ser Ala Ala Ala Ala Ser Lys
      85           90           95
Ser Ala Ala Asn Arg Ala Pro Glu
      100

```

<210> 1499

<211> 402

<212> DNA

<213> Homo sapiens

<400> 1499

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aaatatattc tgccagagtt tgaacacgac accatgctct ggcatttggg catgtcgggg
60
agtttccgtc tatgcgagag caatgaagaa ttacgcaaac atgaccatct aatcattcag
120
tttgaagata tcgaactgcg ttatcatgat cctcgccggt ttggttgcac tctttggctg
180
gatgcacaat cacaagcaa attaatagat acgctggggc cagaaccctt aagcgagaac
240
tttaatgcgg agtattttatt tgaaaaattg aagaataaaa aggttggcac caaagttgca
300
attatggata accatgtggt ggtgggcgta ggcaatattt atgcgaccga aagtctgttt
360
aatctgggga ttcattccagc acaaccggcc tcgactttaa gc
402

```

<210> 1500

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1500

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Lys Tyr Ile Leu Pro Glu Phe Glu His Asp Thr Met Leu Trp His Leu
 1           5           10           15
Gly Met Ser Gly Ser Phe Arg Leu Cys Glu Ser Asn Glu Glu Leu Arg
      20           25           30
Lys His Asp His Leu Ile Ile Gln Phe Glu Asp Ile Glu Leu Arg Tyr
      35           40           45
His Asp Pro Arg Arg Phe Gly Cys Ile Leu Trp Leu Asp Ala Gln Ser
      50           55           60
Gln Ser Lys Leu Ile Asp Thr Leu Gly Pro Glu Pro Leu Ser Glu Asn

```

```

65          70          75          80
Phe Asn Ala Glu Tyr Leu Phe Glu Lys Leu Lys Asn Lys Lys Val Gly
      85          90          95
Thr Lys Val Ala Ile Met Asp Asn His Val Val Val Gly Val Gly Asn
      100          105          110
Ile Tyr Ala Thr Glu Ser Leu Phe Asn Leu Gly Ile His Pro Ala Gln
      115          120          125
Pro Ala Ser Thr Leu Ser
      130

```

```

<210> 1501
<211> 362
<212> DNA
<213> Homo sapiens

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<400> 1501
nnacgcgtgc atgctgcagg catcatccat cgcgatctga agccccaaaa catcttctctg
60
gtgccgagcg cgcgcgagcg cgacttcgtg aagatcttcg acttcggcgc atgccagatg
120
gtcacaccga aggtatcgaa cggcgtgccc gagctgaaga cgagcgcggg aaatctcttc
180
ggcacggtgc cgtacatggc gccggagtgc ttcgaggacg gctcgcaccg gctggatgcg
240
cgcgcggaca tctactccac gggcatcatc atgtaccgct gcgtgacggg gacgctcccc
300
ttcaaggcga acaccgtctt cgagatgctc atccatctgc gcgagggccg cccatcaagc
360
tt
362

```

```

<210> 1502
<211> 120
<212> PRT
<213> Homo sapiens

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<400> 1502
Xaa Arg Val His Ala Ala Gly Ile Ile His Arg Asp Leu Lys Pro Gln
 1          5          10          15
Asn Ile Phe Leu Val Pro Ser Ala Arg Glu Arg Asp Phe Val Lys Ile
      20          25          30
Phe Asp Phe Gly Ala Cys Gln Met Val Thr Pro Lys Val Ser Asn Gly
      35          40          45
Val Pro Glu Leu Lys Thr Ser Ala Gly Asn Leu Phe Gly Thr Val Pro
      50          55          60
Tyr Met Ala Pro Glu Cys Phe Glu Asp Gly Ser His Arg Leu Asp Ala
65          70          75          80
Arg Ala Asp Ile Tyr Ser Thr Gly Ile Ile Met Tyr Arg Cys Val Thr
      85          90          95
Gly Thr Leu Pro Phe Lys Ala Asn Thr Val Phe Glu Met Leu Ile His
      100          105          110
Leu Arg Glu Gly Arg Pro Ser Ser
      115          120

```

<210> 1503  
 <211> 623  
 <212> DNA  
 <213> Homo sapiens

<400> 1503  
 gccggcgtga ggcagagaaa cgtcctcgcc ctgtcattcc accctgaaga gactgacgac  
 60  
 gaccgggtac accgcacctg gttgcgccag gtgtctgagg aggtctgaca gttaccgcaa  
 120  
 gggctcatga cgacccctcc tgaacactgt tcaaagggcg acggcttacc attcctcgct  
 180  
 gtgagtcctg aacagcagct tctcgaatat gaccgacgtc atgtctggca cccctacgcc  
 240  
 ccgacgatcg gggcagaccc aatgcttgca gtgacggctg ccaacggagt ctggctgcag  
 300  
 ctgcatgatg gggaacaccg ccacgaggtc atcgatgca tggcctcgtg gtggtgccag  
 360  
 attcacgggt accgaaaccc ggtcctcgac gaggccctca accgtcaaag ctcccagttc  
 420  
 agtcacgtca tgtttgccgg actcacccat aaggccgcgg ttgacgccgt catatcccta  
 480  
 gtgcgcctgg ccccgggggc cctcgaccgg atcttctctg ctgattccgg gtctgtcggc  
 540  
 gtcgaggtga gtctcaaatt ggctcgtcag gtgcaaactg ctcgaccgc agcgcgccgc  
 600  
 ggcactttga cgaggacacg cgt  
 623

<210> 1504  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<400> 1504  
 Met Thr Thr Pro Pro Glu His Cys Ser Lys Gly Asp Gly Leu Pro Phe  
 1 5 10 15  
 Leu Ala Val Ser Pro Glu Gln Gln Leu Leu Glu Tyr Asp Arg Arg His  
 20 25 30  
 Val Trp His Pro Tyr Ala Pro Thr Ile Gly Ala Asp Pro Met Leu Ala  
 35 40 45  
 Val Thr Ala Ala Asn Gly Val Trp Leu Gln Leu His Asp Gly Glu His  
 50 55 60  
 Arg His Glu Val Ile Asp Ala Met Ala Ser Trp Trp Cys Gln Ile His  
 65 70 75 80  
 Gly Tyr Arg Asn Pro Val Leu Asp Glu Ala Leu Asn Arg Gln Ser Ser  
 85 90 95  
 Gln Phe Ser His Val Met Phe Gly Gly Leu Thr His Lys Ala Ala Val  
 100 105 110  
 Asp Ala Val Ile Ser Leu Val Arg Leu Ala Pro Gly Pro Leu Asp Arg  
 115 120 125  
 Ile Phe Leu Ala Asp Ser Gly Ser Val Gly Val Glu Val Ser Leu Lys  
 130 135 140  
 Leu Ala Arg Gln Val Gln Ile Ala Arg Thr Ala Ala Arg Gly Gly Thr

1244

130	135	140
Gly Gln Leu Ala Asp Gly Ile Asp Gln Phe Thr Gly Asn Leu Val Gly		
145	150	155
Tyr Arg Thr Glu Ile Arg Gln Tyr Ala		160
165		

&lt;210&gt; 1507

&lt;211&gt; 667

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1507

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120
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180
ctcctcccc cgccaccgag agctgcaggc cacatgattc cttttgggta gcactcggga
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480
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540
tggactacag ccgtgctgag tggaggggtt tggtggctgg gtgcccgcct cctattgctc
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660
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667

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&lt;210&gt; 1508

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1508

Met Tyr Arg Asn Arg Val Arg Phe Ala Gly Pro Gly Ala Glu Gly Gly		
1	5	10
Asp Ala Leu Glu Glu Gly Lys Gly Glu Pro Pro Gly Cys Gly Glu His		
20	25	30
Phe Leu Ser Trp Phe Trp Trp Trp Leu His Ser Gly Pro His Pro Ser		
35	40	45
Glu Leu Thr Cys Leu His Pro Gly Pro Pro Cys Thr Leu Ala Ala Gln		
50	55	60
Met Thr Ala Pro Ala Gln Gly Arg Trp Arg Asn Ala Thr Arg Thr Gly		
65	70	75
Thr Trp Gly Pro Gly Val Leu Gly Asp His Pro Glu Leu Gln Asp Arg		80

				85					90					95					
Ser	Trp	Thr	Thr	Ala	Val	Leu	Ser	Gly	Gly	Val	Trp	Trp	Leu	Gly	Ala				
			100					105					110						
Arg	Leu	Leu	Leu	Leu	Leu	Gln	Thr	Leu	Gly	Ser	Arg	Ala	Pro	Pro	Val				
		115					120					125							
Gly	Gln	Cys	Gly	Leu	Leu	Gln	Gly	Thr	His	Ala									
	130						135												

<210> 1509  
 <211> 463  
 <212> DNA  
 <213> Homo sapiens

<400> 1509  
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 120  
 aagggctagg aaccgagcac tgggcgttgg gcttactctc ctctatggt gacctgggag  
 180  
 tgggtgccc aa ggcgtctct tcccagcacc tcagggtcct cactggtaaa ggagggagt  
 240  
 attggaatgt cgccaaagt acttggtctt ggaattctgt ggctattcac gtggactctg  
 300  
 gatggcggtc accaagtaga agagggggccc tgggatagag agaagtctcc tctcctgctc  
 360  
 ctgatttccc aggcctctcc ctctcctggc cctccctcct ttcttccact tccccggatt  
 420  
 cccttcgagt ttggttgcaa ctttaatttt nngttccgat tca  
 463

<210> 1510  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

<400> 1510  
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 1 5 10 15  
 Gly Ser Ser Leu Val Lys Glu Gly Val Ile Gly Met Ser Pro Lys Leu  
 20 25 30  
 Leu Gly Ser Gly Ile Leu Trp Leu Phe Thr Trp Thr Leu Asp Gly Gly  
 35 40 45  
 His Gln Val Glu Glu Gly Pro Trp Asp Arg Glu Lys Ser Pro Leu Leu  
 50 55 60  
 Leu Leu Ile Ser Gln Ala Ser Pro Ser Pro Gly Pro Pro Ser Phe Leu  
 65 70 75 80  
 Pro Leu Pro Arg Ile Pro Phe Glu Phe Gly Cys Asn Phe Asn Phe Xaa  
 85 90 95  
 Phe Arg Phe

<210> 1511  
 <211> 633

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1511

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120
ctggtagcgc aggctctcaa cgaccttgac catgacaagg tagtatccat tctacccccg
180
ctctggaagt tcttcacgc agtggccaca cataccccac gttccgctat gagattcctg
240
tcacgaactc tgtcctcgtc tcgagacaag gacgaccatc ctcgacacac tccgggaggc
300
gaggcctgag atggccagcg tcaaaccac taaggaccgg ggccgggtaca ccaatgatct
360
gtccgccgcg acgcggcagg cagcgaacat gcttctgctg cgtccttttg tgtggaaagt
420
cgtcaaagtg agcgtccacg gagccgacaa cctcgacggg ctcgacgggtg ccttacgtcg
480
ccgtcgctaa ccattcctcc cacctcgacg cgccgctcgt ttttggggcc cttcccaagc
540
ggctgtcaaa gtacctagct accggggccg ctgctgacta tttcttcacc gtctggtgga
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aggccatcgc tccggtgctc ttcttcaacg cgt
633

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&lt;210&gt; 1512

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1512

```

Ala Gly Thr Gly Val Lys Ala Met Ala Leu Gly Pro Gly Trp Val His
 1           5           10           15
Thr Glu Phe His Ser Arg Ala Asn Val Thr Gly Asn His Leu Pro Asp
      20           25           30
Phe Phe Trp Ile Asp Ala Glu Val Leu Val Arg Glu Ala Leu Asn Asp
      35           40           45
Leu Asp His Asp Lys Val Val Ser Ile Pro Thr Pro Leu Trp Lys Phe
      50           55           60
Phe Ile Ala Val Ala Thr His Thr Pro Arg Ser Ala Met Arg Phe Leu
65           70           75           80
Ser Arg Thr Leu Ser Ser Ser Arg Asp Lys Asp Asp His Pro Arg His
      85           90           95
Thr Pro Gly Gly Glu Ala
      100

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&lt;210&gt; 1513

&lt;211&gt; 401

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1513

acgcgtgaag ggggtggaatt tcaccacaga ggggacgccg gggttcctgt tcagaaatat  
 60  
 ttggctcgtcc aatctcgtaa tgcccttctg aatgacttgc tgggcctgcc tcctgacacg  
 120  
 gctgttttcgc aggaaccgcc actcccgtc cttgcggatc tgactctcca ggtcgtgctc  
 180  
 ttctgggatc ttcattgacgg gctgggtaaa atagccgggc gctccagtcg cagaaccccc  
 240  
 tctgcaccgt ggcgagatg aaacttttgt gtccagcagc atcgtccgcg tcgtccgcag  
 300  
 tctgctctgg gcccttgctg aacatcttcc gtgtccgggg gaactgggtg gagtgagggg  
 360  
 tgtactgcgc cccagcgggg cctgtggtgc ccggccggcc g  
 401

<210> 1514

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1514

Met	Phe	Asp	Lys	Gly	Pro	Glu	Gln	Thr	Ala	Asp	Asp	Ala	Asp	Asp	Ala
1				5					10					15	
Ala	Gly	His	Lys	Ser	Phe	Ile	Ser	Ala	Thr	Val	Gln	Thr	Gly	Phe	Cys
			20					25					30		
Asp	Trp	Ser	Ala	Arg	Leu	Phe	Tyr	Pro	Ala	Arg	His	Glu	Asp	Pro	Arg
		35					40					45			
Arg	Ala	Arg	Pro	Gly	Glu	Ser	Asp	Pro	Gln	Gly	Ala	Gly	Val	Ala	Val
	50					55					60				
Pro	Ala	Lys	Gln	Pro	Cys	Gln	Glu	Ala	Gly	Pro	Ala	Ser	His	Ser	Glu
65					70				75					80	
Gly	His	Tyr	Glu	Ile	Gly	Arg	Pro	Asn	Ile	Ser	Glu	Gln	Glu	Pro	Arg
			85					90						95	
Arg	Pro	Leu	Cys	Gly	Glu	Ile	Pro	Pro	Leu	His	Ala				
		100						105							

<210> 1515

<211> 720

<212> DNA

<213> Homo sapiens

<400> 1515

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 120  
 aactacgagc ctgacctgac cgacgatgac acgtcgggtc cgctcgccgt cgtcattgac  
 180  
 gatccccggc cgcctacgcc tattgcgcgc cgccacgaca tcagcgaatc gggcatctat  
 240  
 gagacccatg tcaaagggtt aaccgcctt caccctctcg ttctgagca tcttcgcagc  
 300  
 acctatgccg ggcttgctta tccggctgtt atcgaacacc tcaagtcaat cggagtaaca  
 360



gccatcgaac tactaccggt ccagcagttc gtctccgaac cattcatcgt tgggcgcggc  
 420  
 ttatccgatt actgggggta caacaccctg ggggttctttg cgccgcatgc tgcctactgc  
 480  
 tccgtcggct cgatgggaac ccaggtgcgc gagttcaagg acatggtgac gtctttccac  
 540  
 gaagccggca tgcaggtttt cctcgatgtc gtctacaacc acactggtga gggcggccat  
 600  
 gaaggaccga ctctgtcttt ccgcggcatc gatcacgagt cttattaccg cctcaccaac  
 660  
 gatcacgcga atgactatga cgtcaccggt tgtggcaatt ctgtcgacac ctcccatccg  
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<210> 1516

<211> 240

<212> PRT

<213> Homo sapiens

<400> 1516

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Asp	Pro	Tyr	Ala	Arg	Ala	Ile	Thr	Ala	Gly	Val	Asp	Tyr	His	Gly	Pro
			20					25					30		
Ile	Met	Asp	His	Thr	Pro	Glu	Ser	Asn	Tyr	Glu	Pro	Asp	Leu	Thr	Asp
		35					40					45			
Asp	Ala	Thr	Ser	Val	Pro	Leu	Ala	Val	Val	Ile	Asp	Asp	Pro	Gly	Pro
	50					55				60					
Pro	Thr	Pro	Ile	Ala	Arg	Arg	His	Asp	Ile	Ser	Glu	Ser	Gly	Ile	Tyr
65					70				75					80	
Glu	Thr	His	Val	Lys	Gly	Leu	Thr	Arg	Leu	His	Pro	Leu	Val	Pro	Glu
			85					90						95	
His	Leu	Arg	Ser	Thr	Tyr	Ala	Gly	Leu	Ala	Tyr	Pro	Ala	Val	Ile	Glu
			100				105						110		
His	Leu	Lys	Ser	Ile	Gly	Val	Thr	Ala	Ile	Glu	Leu	Leu	Pro	Val	Gln
		115					120						125		
Gln	Phe	Val	Ser	Glu	Pro	Phe	Ile	Val	Gly	Arg	Gly	Leu	Ser	Asp	Tyr
	130					135					140				
Trp	Gly	Tyr	Asn	Thr	Leu	Gly	Phe	Phe	Ala	Pro	His	Ala	Ala	Tyr	Cys
145					150				155					160	
Ser	Val	Gly	Ser	Met	Gly	Thr	Gln	Val	Arg	Glu	Phe	Lys	Asp	Met	Val
			165						170					175	
Thr	Ser	Phe	His	Glu	Ala	Gly	Ile	Glu	Val	Phe	Leu	Asp	Val	Val	Tyr
			180					185					190		
Asn	His	Thr	Gly	Glu	Gly	Gly	His	Glu	Gly	Pro	Thr	Leu	Ser	Phe	Arg
		195					200					205			
Gly	Ile	Asp	His	Glu	Ser	Tyr	Tyr	Arg	Leu	Thr	Asn	Asp	His	Arg	Asn
	210					215					220				
Asp	Tyr	Asp	Val	Thr	Gly	Cys	Gly	Asn	Ser	Val	Asp	Thr	Ser	His	Pro
225					230					235					240

<210> 1517

<211> 497

<212> DNA

<213> Homo sapiens

&lt;400&gt; 1517

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 120  
 tccttttcca tcgggctgca agtactgttt ccattcctcc tggcaggctt tgggaccgtg  
 180  
 gctgctggca tgggtgttga catcgtgcag cactgggaag tcttcagaa ggtgacagag  
 240  
 gtcttcatcc tagtgctgc gctgctgggg ctcaaaggga acctggaaat gaccctggca  
 300  
 tcaaggcttt ccactgcagc caacattgga cacatggaca cacccaagga gctctggcgg  
 360  
 atgatcactg ggaacatggc cctcatccag gtgcaggccc cggtgggtggg cttcctggcg  
 420  
 tccatgcag ccgtcgtctt tggctggatc cctgatggcc acttcagtat tccgcacgcc  
 480  
 ttctgctct gtggtag  
 497

&lt;210&gt; 1518

&lt;211&gt; 165

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1518

Xaa	Arg	Val	Lys	Gly	Val	Arg	Glu	Glu	Asp	Ala	Leu	Leu	Glu	Asn	Gly
1				5					10					15	
Ser	Gln	Ser	Asn	Glu	Ser	Asp	Asp	Val	Ser	Thr	Asp	Arg	Gly	Pro	Ala
			20					25					30		
Pro	Pro	Ser	Pro	Leu	Lys	Glu	Thr	Ser	Phe	Ser	Ile	Gly	Leu	Gln	Val
			35				40					45			
Leu	Phe	Pro	Phe	Leu	Leu	Ala	Gly	Phe	Gly	Thr	Val	Ala	Ala	Gly	Met
	50					55				60					
Val	Leu	Asp	Ile	Val	Gln	His	Trp	Glu	Val	Phe	Gln	Lys	Val	Thr	Glu
65					70					75				80	
Val	Phe	Ile	Leu	Val	Pro	Ala	Leu	Leu	Gly	Leu	Lys	Gly	Asn	Leu	Glu
			85						90				95		
Met	Thr	Leu	Ala	Ser	Arg	Leu	Ser	Thr	Ala	Ala	Asn	Ile	Gly	His	Met
			100					105					110		
Asp	Thr	Pro	Lys	Glu	Leu	Trp	Arg	Met	Ile	Thr	Gly	Asn	Met	Ala	Leu
		115					120				125				
Ile	Gln	Val	Gln	Ala	Pro	Val	Val	Gly	Phe	Leu	Ala	Ser	Ile	Ala	Ala
	130					135				140					
Val	Val	Phe	Gly	Trp	Ile	Pro	Asp	Gly	His	Phe	Ser	Ile	Pro	His	Ala
145					150					155				160	
Phe	Leu	Leu	Cys	Gly											
				165											

&lt;210&gt; 1519

&lt;211&gt; 2076

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1519

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gtgtgcaatg agatgttggg aaaatcccag tttgttgctt gtatgggtac ttgtcattca  
120  
cttacaaaaa ttgaaggagt gctctctggg gatccacttg atctgaaaat gtttgaggct  
180  
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240  
cccacagtgg ttctgtcctcc caaacaactg cttcctgaat ctacccctgc aggaaaccaa  
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gaaatggagc tgtttgaact tccagctact tatgagatag gaattgttcg ccagttccca  
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720  
acaggtgaca gtatgttgac tgctgtctct gtggccagag attgtggaat gattctacct  
780  
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840  
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1080  
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1140  
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1200  
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1320  
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1380  
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1440  
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1560

gtcaaacagc aaccttggtg tgaagtgtgg catccaaaat cagatgcttg taatacaaca  
 1620  
 ggaagcgggt tttggaattc ttcacacgta gacaatgaaa ccgaacttga tgaacataat  
 1680  
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 1740  
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 1800  
 gttttttctg tgattttttt atatatattt atattattca tcatgttgta tccagttgcc  
 1860  
 tctgttgacc aggttcttca gatagtgtgt gtaccatata agtggcgtgt aactatgctc  
 1920  
 atcattgttc ttgtcaatgc ctttgtgtct atcacagtgg agaacttctt ccttgacatg  
 1980  
 gtccttttga aagttgtgtt caaccgagac aaacaaggag agtatcggtt cagcaccaca  
 2040  
 cagccaccgc aggagtcagt ggatcggtgg ggaaaa  
 2076

<210> 1520

<211> 692

<212> PRT

<213> Homo sapiens

<400> 1520

Xaa	Asp	Leu	Trp	Gly	Ile	Gln	Arg	Val	Glu	Asn	Ala	Arg	Phe	Leu	Ser
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Pro	Glu	Glu	Asn	Val	Cys	Asn	Glu	Met	Leu	Val	Lys	Ser	Gln	Phe	Val
			20					25					30		
Ala	Cys	Met	Ala	Thr	Cys	His	Ser	Leu	Thr	Lys	Ile	Glu	Gly	Val	Leu
		35					40					45			
Ser	Gly	Asp	Pro	Leu	Asp	Leu	Lys	Met	Phe	Glu	Ala	Ile	Gly	Trp	Ile
	50					55				60					
Leu	Glu	Glu	Ala	Thr	Glu	Glu	Glu	Thr	Ala	Leu	His	Asn	Arg	Ile	Met
65					70				75					80	
Pro	Thr	Val	Val	Arg	Pro	Pro	Lys	Gln	Leu	Leu	Pro	Glu	Ser	Thr	Pro
			85					90						95	
Ala	Gly	Asn	Gln	Glu	Met	Glu	Leu	Phe	Glu	Leu	Pro	Ala	Thr	Tyr	Glu
			100					105					110		
Ile	Gly	Ile	Val	Arg	Gln	Phe	Pro	Phe	Ser	Ser	Ala	Leu	Gln	Arg	Met
	115					120					125				
Ser	Val	Val	Ala	Arg	Val	Leu	Gly	Asp	Arg	Lys	Met	Asp	Ala	Tyr	Met
	130					135				140					
Lys	Gly	Ala	Pro	Glu	Ala	Ile	Ala	Gly	Leu	Cys	Lys	Pro	Glu	Thr	Val
145				150				155						160	
Pro	Val	Asp	Phe	Gln	Asn	Val	Leu	Glu	Asp	Phe	Thr	Lys	Gln	Gly	Phe
			165					170						175	
Arg	Val	Ile	Ala	Leu	Ala	His	Arg	Lys	Leu	Glu	Ser	Lys	Leu	Thr	Trp
		180					185						190		
His	Lys	Val	Gln	Asn	Ile	Ser	Arg	Asp	Ala	Ile	Glu	Asn	Asn	Met	Asp
	195					200				205					
Phe	Met	Gly	Leu	Ile	Ile	Met	Gln	Asn	Lys	Leu	Lys	Gln	Glu	Thr	Pro
	210					215				220					
Ala	Val	Leu	Glu	Asp	Leu	His	Lys	Ala	Asn	Ile	Arg	Thr	Val	Met	Val

225					230					235					240
Thr	Gly	Asp	Ser	Met	Leu	Thr	Ala	Val	Ser	Val	Ala	Arg	Asp	Cys	Gly
				245					250					255	
Met	Ile	Leu	Pro	Gln	Asp	Lys	Val	Ile	Ile	Ala	Glu	Ala	Leu	Pro	Pro
			260					265					270		
Lys	Asp	Gly	Lys	Val	Ala	Lys	Ile	Asn	Trp	His	Tyr	Ala	Asp	Ser	Leu
		275					280					285			
Thr	Gln	Cys	Ser	His	Pro	Ser	Ala	Ile	Asp	Pro	Glu	Ala	Ile	Pro	Val
	290					295					300				
Lys	Leu	Val	His	Asp	Ser	Leu	Glu	Asp	Leu	Gln	Met	Thr	Arg	Tyr	His
305					310					315					320
Phe	Ala	Met	Asn	Gly	Lys	Ser	Phe	Ser	Val	Ile	Leu	Glu	His	Phe	Gln
			325						330					335	
Asp	Leu	Val	Pro	Lys	Leu	Met	Leu	His	Gly	Thr	Val	Phe	Ala	Arg	Met
			340					345					350		
Ala	Pro	Asp	Gln	Lys	Thr	Gln	Leu	Ile	Glu	Ala	Leu	Gln	Asn	Val	Asp
		355					360					365			
Tyr	Phe	Val	Gly	Met	Cys	Gly	Asp	Gly	Ala	Asn	Asp	Cys	Gly	Ala	Leu
	370					375					380				
Lys	Arg	Ala	His	Gly	Gly	Ile	Ser	Leu	Ser	Glu	Leu	Glu	Ala	Ser	Val
385					390					395					400
Ala	Ser	Pro	Phe	Thr	Ser	Lys	Thr	Pro	Ser	Ile	Ser	Cys	Val	Pro	Asn
			405						410					415	
Leu	Ile	Arg	Glu	Gly	Arg	Ala	Ala	Leu	Ile	Thr	Ser	Phe	Cys	Val	Phe
			420					425					430		
Lys	Phe	Met	Ala	Leu	Tyr	Ser	Ile	Ile	Gln	Tyr	Phe	Ser	Val	Thr	Leu
		435					440					445			
Leu	Tyr	Ser	Ile	Leu	Ser	Asn	Leu	Gly	Asp	Phe	Gln	Phe	Leu	Phe	Ile
	450					455					460				
Asp	Leu	Ala	Ile	Ile	Leu	Val	Val	Val	Phe	Thr	Met	Ser	Leu	Asn	Pro
465					470					475					480
Ala	Trp	Lys	Glu	Leu	Val	Ala	Gln	Arg	Pro	Pro	Ser	Gly	Leu	Ile	Ser
			485						490					495	
Gly	Ala	Leu	Leu	Phe	Ser	Val	Leu	Ser	Gln	Ile	Ile	Ile	Cys	Ile	Gly
			500					505					510		
Phe	Gln	Ser	Leu	Gly	Phe	Phe	Trp	Val	Lys	Gln	Gln	Pro	Trp	Tyr	Glu
		515					520					525			
Val	Trp	His	Pro	Lys	Ser	Asp	Ala	Cys	Asn	Thr	Thr	Gly	Ser	Gly	Phe
	530					535						540			
Trp	Asn	Ser	Ser	His	Val	Asp	Asn	Glu	Thr	Glu	Leu	Asp	Glu	His	Asn
545					550					555					560
Ile	Gln	Asn	Tyr	Glu	Asn	Thr	Thr	Val	Phe	Phe	Ile	Ser	Ser	Phe	Gln
			565						570					575	
Tyr	Leu	Ile	Val	Ala	Ile	Ala	Phe	Ser	Lys	Gly	Lys	Pro	Phe	Arg	Gln
			580				585						590		
Pro	Cys	Tyr	Lys	Asn	Tyr	Phe	Phe	Val	Phe	Ser	Val	Ile	Phe	Leu	Tyr
		595					600					605			
Ile	Phe	Ile	Leu	Phe	Ile	Met	Leu	Tyr	Pro	Val	Ala	Ser	Val	Asp	Gln
	610					615					620				
Val	Leu	Gln	Ile	Val	Cys	Val	Pro	Tyr	Gln	Trp	Arg	Val	Thr	Met	Leu
625					630					635					640
Ile	Ile	Val	Leu	Val	Asn	Ala	Phe	Val	Ser	Ile	Thr	Val	Glu	Asn	Phe
			645						650					655	
Phe	Leu	Asp	Met	Val	Leu	Trp	Lys	Val	Val	Phe	Asn	Arg	Asp	Lys	Gln

660 665 670  
 Gly Glu Tyr Arg Phe Ser Thr Thr Gln Pro Pro Gln Glu Ser Val Asp  
 675 680 685  
 Arg Trp Gly Lys  
 690

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<210> 1521
<211> 373
<212> DNA
<213> Homo sapiens
```

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<400> 1521
acgcgtcaca gctgaagccc gcagtgatag ccgacgcaca agccgaatca ataacttgtg
60
tctgcacgcg ctggggcctca acgagtagtt cagcaaaaagt aggcggaaca ggcgcaacga
120
gcgtaccatc cgatacacgc cagccttgac tgctgataca ccccgaccac tgcgcatcag
180
tgatttcaat ggcgggttaca cagtctggta tcggactgtc gatatcatcg taataggcga
240
tcacattccc atttgcatcg tatgctgcga acttttgacc catgattatt atttccgaa
300
tgcaaaccaa taaacagtgt tggcgcttga tgaatagccg ttctgcacca cggcggtaga
360
gagtggcgtc gac
373
```

```
<210> 1522
<211> 94
<212> PRT
<213> Homo sapiens
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```

<400> 1522
Met Gly Gln Lys Phe Ala Ala Tyr Asp Ala Asn Gly Asn Val Ile Ala
  1             5             10             15
Tyr Tyr Asp Asp Ile Asp Ser Pro Ile Pro Asp Cys Val Thr Ala Ile
          20             25             30
Glu Ile Thr Asp Ala Gln Trp Leu Gly Cys Ile Ser Ser Gln Gly Trp
          35             40             45
Arg Val Ser Asp Gly Thr Leu Val Ala Pro Val Pro Pro Thr Phe Ala
          50             55             60
Glu Leu Leu Val Glu Ala Gln Arg Val Gln Thr Gln Val Ile Asp Ser
65          70             75             80
Ala Cys Ala Ser Ala Ile Thr Ala Gly Phe Ser Cys Asp Ala
          85             90

```

```
<210> 1523
<211> 525
<212> DNA
<213> Homo sapiens
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```
<400> 1523
nnacgcgtgc ggtcaatatg cgcgcattcc cataagcgct tggtggcatg tttccagggc
60
```

cagcatggca ccgatgccga gaggagacac aaaaaactgc ctctgacagc tcttgctcaa  
 120  
 aatatgcaag aagcatcgac tcagctggaa gactctctcc tggggaagat gctggagacg  
 180  
 tgtggagatg ctgagaatca gctggctctc gagctctccc agcacgaagt ctttggtgag  
 240  
 aaggagatcg tggaccctct gtacggcata gctgaggtgg agattcccaa catccagaag  
 300  
 cagaggaagc agcttgcaag attggtgtta gactgggatt cagtcagagc caggtggaac  
 360  
 caagctcaca aatcctcagg aaccaacttt caggggcttc catcaaaaat agatactcta  
 420  
 aaggaaggga tggatgaagc tggaaataaa gtagaacagt gcaaggatca acttgcagca  
 480  
 gacatgtaca actttatggc caaagaaggg gagtatggca aattt  
 525

<210> 1524  
 <211> 175  
 <212> PRT  
 <213> Homo sapiens

<400> 1524  
 Xaa Arg Val Arg Ser Ile Cys Arg His Ser His Lys Arg Leu Val Ala  
 1 5 10 15  
 Cys Phe Gln Gly Gln His Gly Thr Asp Ala Glu Arg Arg His Lys Lys  
 20 25 30  
 Leu Pro Leu Thr Ala Leu Ala Gln Asn Met Gln Glu Ala Ser Thr Gln  
 35 40 45  
 Leu Glu Asp Ser Leu Leu Gly Lys Met Leu Glu Thr Cys Gly Asp Ala  
 50 55 60  
 Glu Asn Gln Leu Ala Leu Glu Leu Ser Gln His Glu Val Phe Val Glu  
 65 70 75 80  
 Lys Glu Ile Val Asp Pro Leu Tyr Gly Ile Ala Glu Val Glu Ile Pro  
 85 90 95  
 Asn Ile Gln Lys Gln Arg Lys Gln Leu Ala Arg Leu Val Leu Asp Trp  
 100 105 110  
 Asp Ser Val Arg Ala Arg Trp Asn Gln Ala His Lys Ser Ser Gly Thr  
 115 120 125  
 Asn Phe Gln Gly Leu Pro Ser Lys Ile Asp Thr Leu Lys Glu Gly Met  
 130 135 140  
 Asp Glu Ala Gly Asn Lys Val Glu Gln Cys Lys Asp Gln Leu Ala Ala  
 145 150 155 160  
 Asp Met Tyr Asn Phe Met Ala Lys Glu Gly Glu Tyr Gly Lys Phe  
 165 170 175

<210> 1525  
 <211> 294  
 <212> DNA  
 <213> Homo sapiens

<400> 1525  
 gtgcacgagc gcatggatct catccgccaa agcgtggatg cgcgcatataa cgtggactac  
 60

tgggtccggcc tgctcgtgga ctatacctcg cagcacggcg tcgacgtttt ggtcaagggg  
 120  
 ctgcgttctt cctcggacta tgaatatgaa ctgccgatgg cccagatgaa cggcggttta  
 180  
 tctggcatcg atacggctctt tttgcttacc gatgaaaagt acggctacat cagctcatcg  
 240  
 ctgtgcaaac aggtcgcgca attcggcggg gaggtcaccg ggatgcttcg gatc  
 294

<210> 1526

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1526

Val	His	Glu	Arg	Met	Asp	Leu	Ile	Arg	Gln	Ser	Val	Asp	Ala	Arg	Ile
1				5				10						15	
Asn	Val	Asp	Tyr	Trp	Ser	Gly	Leu	Leu	Val	Asp	Tyr	Thr	Ser	Gln	His
		20					25					30			
Gly	Val	Asp	Val	Leu	Val	Lys	Gly	Leu	Arg	Ser	Ser	Leu	Asp	Tyr	Glu
		35				40						45			
Tyr	Glu	Leu	Pro	Met	Ala	Gln	Met	Asn	Arg	Arg	Leu	Ser	Gly	Ile	Asp
		50				55					60				
Thr	Val	Phe	Leu	Leu	Thr	Asp	Glu	Lys	Tyr	Gly	Tyr	Ile	Ser	Ser	Ser
65				70				75						80	
Leu	Cys	Lys	Gln	Val	Ala	Gln	Phe	Gly	Gly	Glu	Val	Thr	Gly	Met	Leu
			85					90						95	

Arg Ile

<210> 1527

<211> 371

<212> DNA

<213> Homo sapiens

<400> 1527

tgtacaaacc cgcctatgag caagtgcaaa ccaacatgga aatgctcaag gccggacgca  
 60  
 gcttcaagga atacgccgag atggcctgga agattcccga gcattacaaa aacaaccgct  
 120  
 acttcgcctt ggtgcacggg gttggcatga cggcgagta cccttggttg gtgcaccgag  
 180  
 aagacattga cgcgctgggt tacgacgggtg tgttcgagga cggcatgacc atctgtgtgg  
 240  
 aaagctacat cggccacgac gacggcggcg aaggcgtgaa gctcgaagaa cagatctaca  
 300  
 tccacgaaca cagcatcgag ttgctctcgg attatccgtt cgaccacgc ctgttgccgc  
 360  
 gctgaacgag t  
 371

<210> 1528

<211> 109

<212> PRT



<213> Homo sapiens

<400> 1528

Met	Glu	Met	Leu	Lys	Ala	Gly	Arg	Ser	Phe	Lys	Glu	Tyr	Ala	Glu	Met
1				5					10					15	
Ala	Trp	Lys	Ile	Pro	Glu	His	Tyr	Lys	Asn	Asn	Arg	Tyr	Phe	Ala	Leu
		20						25					30		
Val	His	Gly	Val	Gly	Met	Thr	Gly	Glu	Tyr	Pro	Trp	Val	Val	His	Arg
		35					40					45			
Glu	Asp	Ile	Asp	Ala	Leu	Gly	Tyr	Asp	Gly	Val	Phe	Glu	Ala	Gly	Met
	50					55					60				
Thr	Ile	Cys	Val	Glu	Ser	Tyr	Ile	Gly	His	Asp	Asp	Gly	Gly	Glu	Gly
65					70					75				80	
Val	Lys	Leu	Glu	Glu	Gln	Ile	Tyr	Ile	His	Glu	His	Ser	Ile	Glu	Leu
				85					90					95	
Leu	Ser	Asp	Tyr	Pro	Phe	Asp	Pro	Arg	Leu	Leu	Pro	Arg			
		100						105							

<210> 1529

<211> 609

<212> DNA

<213> Homo sapiens

<400> 1529

```

naccgcgtggt gctcaccctc cgtgtgactc gcgctctgtc cggctcaggg ctgcacctcc
60
gtgggacttg cgtctgtgcc ggctcagggc tcgccctccg tgggacttgc gctctgtccg
120
gctcagggct cgcctccgtg gggacttgcg ctctgtccgg ctcagggctc gccctccgtg
180
ggacttgcg cctgtccggc tcagggctcg cctccgtgg gacttgcgct ctgtccggct
240
cagggctcgc cctccgtggg acttgcgctc tgtccggctc agggctcgcc ctccgtggga
300
tttgcgctct gtctggctca ggctgcgcag ggcaatggag gaacctcccg agcaggccca
360
gcggctcctt ccaccagcc cccatctccg gccggccatt tgtgaggccc tctgccactg
420
aggtgcactg ttccaattc ctcatcaca agctctacct tccacgagcc cagagcatga
480
acgcattcgg ccattgctc caccactctg cgaggagcac agcctcttct ccaccgtcca
540
atagcgtggt cctcctttcc caggcctcac agaatgctct gtccgcatcc tcccagcatt
600
ccattcacg
609

```

<210> 1530

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1530

Leu Ala Leu Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Leu Ala Leu

1					5					10					15				
Cys	Pro	Ala	Gln	Gly	Ser	Pro	Ser	Val	Gly	Leu	Ala	Leu	Cys	Pro	Ala				
			20							25				30					
Gln	Gly	Ser	Pro	Ser	Val	Gly	Leu	Ala	Leu	Cys	Pro	Ala	Gln	Gly	Ser				
			35							40				45					
Pro	Ser	Val	Gly	Leu	Ala	Leu	Cys	Pro	Ala	Gln	Gly	Ser	Pro	Ser	Val				
			50							55				60					
Gly	Leu	Ala	Leu	Cys	Pro	Ala	Gln	Gly	Ser	Pro	Ser	Val	Gly	Leu	Ala				
65									70					75					
Leu	Cys	Pro	Ala	Gln	Gly	Ser	Pro	Ser	Val	Gly	Phe	Ala	Leu	Cys	Leu				
			85							90				95					
Ala	Gln	Ala	Ala	Gln	Gly	Asn	Gly	Gly	Thr	Ser	Arg	Ala	Gly	Pro	Ala				
			100							105				110					
Ala	Pro	Ser	Thr	Gln	Pro	Pro	Ser	Pro	Ala	Gly	His	Leu							
			115							120				125					

```
<210> 1531
<211> 726
<212> DNA
<213> Homo sapiens
```

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<400> 1531
accggtcgcc ggcttgctga gggtaacctt ctggccacag ttggtgatgg tgataggtcc
60
agcgttggac tgggacgccg acgctgaaaa agaagctgac gagtccttgg gggcgcccgc
120
acattcggca agcatgagga cggggagcat cgagaccgcg acagctcggc gaaggaattt
180
cggggtggca ggcattggca aactagcttt ctgtgatcgg cgtgcgcggc cgggcaacaa
240
cagggcgctcg tcaggtggtc ttcgggctcg acttcgtctc cgttcccggc accttcccag
300
tgcgcatggc caggtgggtc aagtcggggc ggatcagtca taccgctgcg ctcagctccg
360
gcttttcacc ggattccagc gctggtgtgg tcaccagcaa cctgacgcga ggatttttag
420
accccttctg cataccgcta tccagggcct ccacgacagc ggcaccgatg acgatcgcgt
480
tcaccgagcg cggcgttttc ggcagcttcc acatggggat cagaccatat tgatgcactg
540
gcgatccctt catacgcgag ccgccgatat ggcccccgag tgaggccctt cagttcgcgc
600
tgacgcatgc cgctctgcgc agcctgccaa cgctttcccg caacctcacc acacgtttgc
660
cgggttcggg gctggcgacg tgagccgtgt cacaagttca cgagctgggt caccgcgtccg
720
cgagag
726

```

```
<210> 1532
<211> 178
<212> PRT
<213> Homo sapiens
```

&lt;400&gt; 1532

Met Val Ile Gly Pro Ala Leu Asp Trp Asp Ala Asp Ala Glu Lys Glu  
 1 5 10 15  
 Ala Asp Glu Ser Leu Gly Ala Pro Ala His Ser Ala Ser Met Arg Thr  
 20 25 30  
 Gly Ser Ile Glu Thr Ala Thr Ala Arg Arg Arg Asn Phe Gly Val Ala  
 35 40 45  
 Gly Met Ala Lys Leu Ala Phe Cys Asp Arg Arg Ala Arg Pro Gly Asn  
 50 55 60  
 Asn Arg Ala Ser Ser Gly Gly Leu Arg Ala Arg Leu Arg Leu Arg Ser  
 65 70 75 80  
 Arg His Leu Pro Ser Ala His Gly Gln Val Val Gln Val Gly Ala Asp  
 85 90 95  
 Gln Ser Tyr Arg Cys Ala Gln Leu Arg Leu Phe Thr Gly Phe Gln Arg  
 100 105 110  
 Trp Cys Gly His Gln Gln Pro Asp Ala Arg Ile Leu Ala Pro Pro Ser  
 115 120 125  
 His Thr Ala Ile Gln Gly Leu His Asp Ser Gly Thr Asp Asp Asp Arg  
 130 135 140  
 Val His Arg Ala Arg Arg Phe Arg Gln Leu Pro His Gly Asp Gln Thr  
 145 150 155 160  
 Ile Leu Met His Trp Arg Ser Leu His Thr Arg Ala Ala Asp Met Ala  
 165 170 175  
 Pro Glu

&lt;210&gt; 1533

&lt;211&gt; 364

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1533

natatgctgg tcgatcatgt gcatcagatc gtccagtggc cggagcgcgg ctggtctggg  
 60  
 gagattattc acagcgaacg ggcgaccggc ggtgcgcgcg ttaacgtcct gctgacgctg  
 120  
 gttaaaatgc acgtcggtt gccgttgacg gcggtcggtc ttatcggcga agacagcgat  
 180  
 ggcgattaca ttatggcgat gctcgaccag taccacgtca atcgccagcg ggtacagcgc  
 240  
 accacgtttg cccccacgtc gatgtcgacg gtgatgaccg atcccactgg gcagcgcacc  
 300  
 tttttccatt cgctgcgcg caatcgctg ctcgatctcc ccgcctttga tcgactcgac  
 360  
 gcgt  
 364

&lt;210&gt; 1534

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1534

Xaa Met Leu Val Asp His Val His Gln Ile Val Gln Trp Pro Glu Arg

1		5		10		15									
Gly	Trp	Leu	Ala	Glu	Ile	Ile	His	Ser	Glu	Arg	Ala	Thr	Gly	Gly	Ala
		20						25					30		
Pro	Leu	Asn	Val	Leu	Leu	Thr	Leu	Val	Lys	Met	His	Val	Gly	Leu	Pro
		35						40					45		
Leu	Gln	Ala	Val	Gly	Leu	Ile	Gly	Glu	Asp	Ser	Asp	Gly	Asp	Tyr	Ile
	50					55					60				
Met	Ala	Met	Leu	Asp	Gln	Tyr	His	Val	Asn	Arg	Gln	Arg	Val	Gln	Arg
65					70					75				80	
Thr	Thr	Phe	Ala	Pro	Thr	Ser	Met	Ser	Gln	Val	Met	Thr	Asp	Pro	Thr
			85						90					95	
Gly	Gln	Arg	Thr	Phe	Phe	His	Ser	Pro	Ala	Ala	Asn	Arg	Leu	Leu	Asp
			100					105					110		
Leu	Pro	Ala	Phe	Asp	Arg	Leu	Asp	Ala							
		115					120								

&lt;210&gt; 1535

&lt;211&gt; 369

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1535

```

gaattcgggg ggctccggga atgaagtttc catttcgcaa gccttctgaa gcaaattccgc
60
caatcccttg ggcccgcggt gcgtgccggc cagcggccag tcctggcccg gaatgatcca
120
ctcgatatct tcggcagaca acgccagcag accgggccta tcgccgcggc ccatggctgc
180
aaaaaaaaactc ttcacagtct ggacattccc ttgtgtgctc atcgaaatct ctccatgtcc
240
tttacctggg atcgtgtccg atctcatcgg acgcgttgag gacctgctgg tgaggacggg
300
gtgtcgggtga ttcagccgat atcgactttg catggcgatg tcccagctgc cggagccgtt
360
actggccac
369

```

&lt;210&gt; 1536

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1536

Met	Gln	Ser	Arg	Tyr	Arg	Leu	Asn	His	Arg	His	Pro	Val	Leu	Thr	Ser
1				5					10				15		
Arg	Ser	Ser	Thr	Arg	Pro	Met	Arg	Ser	Asp	Thr	Ile	Pro	Gly	Lys	Gly
			20					25					30		
His	Gly	Glu	Ile	Ser	Met	Ser	Thr	Gln	Gly	Asn	Val	Gln	Thr	Val	Lys
	35					40					45				
Ser	Phe	Phe	Ala	Ala	Met	Gly	Arg	Gly	Asp	Arg	Pro	Gly	Leu	Leu	Ala
	50					55					60				
Leu	Ser	Ala	Glu	Asp	Ile	Glu	Trp	Ile	Ile	Pro	Gly	Gln	Asp	Trp	Pro
65					70					75				80	
Leu	Ala	Gly	Thr	His	Arg	Gly	Pro	Gln	Gly	Leu	Ala	Asp	Leu	Leu	Gln

			85					90				95		
Lys	Ala	Cys	Glu	Met	Glu	Thr	Ser	Phe	Pro	Glu	Pro	Pro	Glu	Phe
			100					105					110	

<210> 1537  
 <211> 294  
 <212> DNA  
 <213> Homo sapiens

<400> 1537  
 ccactcgcgg cgctcctga gccctctcgt gtgtcaggac gccagcatcc tgttcgtgtt  
 60  
 ctcggggctg ctgcacgtgt accagcggaa gatcggcagc caggaggaca cctgcttggt  
 120  
 cctcacgcgc cccggggaga tgggtgggcca gctggccgtg ctcaccgagg agacctcgtc  
 180  
 ggctgtgtgg agacactgac ccaccaggcc cgggcgacca cgggtgcatgc cgttcgggac  
 240  
 tcagaattgg ccaagctgcc ggcaggagcc ctcacgtcca tcaagcgag gtac  
 294

<210> 1538  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 1538  
 Pro Leu Ala Ala Pro Pro Glu Pro Ser Arg Val Ser Gly Arg Gln His  
 1 5 10 15  
 Pro Val Arg Val Leu Gly Ala Ala Ala Arg Val Pro Ala Glu Asp Arg  
 20 25 30  
 Gln Pro Gly Gly His Leu Leu Val Pro His Ala Pro Arg Gly Asp Gly  
 35 40 45  
 Gly Pro Ala Gly Arg Ala His Arg Gly Asp Leu Val Gly Val Val Glu  
 50 55 60  
 Thr Leu Thr His Gln Ala Arg Ala Thr Thr Val His Ala Val Arg Asp  
 65 70 75 80  
 Ser Glu Leu Ala Lys Leu Pro Ala Gly Ala Leu Thr Ser Ile Lys Arg  
 85 90 95  
 Arg Tyr

<210> 1539  
 <211> 1015  
 <212> DNA  
 <213> Homo sapiens

<400> 1539  
 acgcgttcgg gcgtcaggca cacgcatctc aacagatgtg gctgacaccc aaggcagtcg  
 60  
 gcctcagtg cctgtcacc acctagaacc tggtcacagc atgtcatccg ggctgctctg  
 120  
 gccttgactg gacatgatta tttatcctta cacaccgtgg ctgctctaca ggccaagaaa  
 180

caggctgctc agccagggtc aggagaaggt gggtcaggct ccccggggac ctcaggccct  
 240  
 gacgcatacct ggccctaccc taggcctcct ctgtcggggc agcctggctc agcagagccc  
 300  
 gggacacacg gctgaggcca cccaggctgg gccatcttgc cctgttttg tgccccctac  
 360  
 tcagttctcc ttctgtcctg gctcaggctc aggccagtca agaggggtggc tgagaagcag  
 420  
 gaggagcctc agagaccctc ccctcgaaag cactggggct tccacctcac aagcggcagg  
 480  
 ttgcgttttg gagctgctgg tccatcgccc aggcctggcc aggggcaggc gaggatcctg  
 540  
 gttgccgata catcgctccag gcttgcccca ggagccggtg aggaacctgg ggctgttggtg  
 600  
 caggggtcgc cgtctccagc tctctgccgt ggtgagggga ttgtgctgtg tgcacaccac  
 660  
 ctggctgcat cgaatcccac catggcccag agggtggaac tgtggctcct tggggggcca  
 720  
 gcatccccag tctaattgggt gcccctgcca ctctcctgag ttcccgtgca gagctcccc  
 780  
 caacacctca gccttcacct ttctcagtta atcaaaagat tccaaaaaaa gcaaaccat  
 840  
 cagaacggct tctccaccg agtggtcagg ataaataatc atgtccagtc aaggccagag  
 900  
 cageccggat gacatgctat gaacaggttt taggtgggtg acagggcact gaggccgact  
 960  
 gccttgggtg tcagccacat ctgttgagat gcgtgtgct gacgcccga cgcgt  
 1015

<210> 1540  
 <211> 89  
 <212> PRT  
 <213> Homo sapiens

<400> 1540  
 His Pro Arg Gln Ser Ala Ser Val Pro Cys His Pro Pro Arg Thr Cys  
 1 5 10 15  
 Ser Gln His Val Ile Arg Ala Ala Leu Ala Leu Thr Gly His Asp Tyr  
 20 25 30  
 Leu Ser Leu His Thr Val Ala Ala Leu Gln Ala Lys Lys Gln Ala Ala  
 35 40 45  
 Gln Pro Gly Ser Gly Glu Gly Gly Ser Gly Ser Pro Gly Thr Ser Gly  
 50 55 60  
 Pro Asp Ala Ser Trp Pro His Pro Arg Pro Pro Leu Ser Gly Gln Pro  
 65 70 75 80  
 Gly Ser Ala Glu Pro Gly Thr His Gly  
 85

<210> 1541  
 <211> 1482  
 <212> DNA  
 <213> Homo sapiens

<400> 1541

cgccgatcac ggggagcccc tcgactgect cccagaacaa agtgggaaag ggaagcttag  
60  
cccgccgctg ccgcctccga gcagcccgcc aggactctgg ctactggaga tgggcgcccc  
120  
gctatcgagg cgacgggtgc cggcggaccc gtccctggcc ctggacgcgc tgcccccgga  
180  
gctgctggtg caggtgctga gccacgtgcc ggccacgctc cttggacacg cgatgccgcc  
240  
cagtgtgccg cgcttggcgc gacatagtgg acgggcccac tgggaggctg ctgcaactgg  
300  
cccgcgaccg cagcgccgag ggccgagcac tctacgcagt ggctcaacgc tgctgcccc  
360  
acaacgaaga caaagaggag ttcccgtgtg gcgccttggc gcgctactga ctgcgcgcgc  
420  
ccttcggccg caatctcatc ttcaactcct gcggagagca gggcttcaga ggctgggagg  
480  
tggagcatgg cgggaacggc tgggccatag aaaagaacct aacaccggtg cctggggctc  
540  
cttcgcagac ctgcttcgtg acctctttcg aatgggtgctc caagaggcag cttgtggacc  
600  
tggatgatga aggggtgtgg caggagctgc tggacagcgc ccagattgag atctgtgtgg  
660  
ctgactggtg gggcgctcga gagaactgcg gctgcgtcta ccagctccgg gtccgccttc  
720  
tggatgtgta tgaaaaggaa gtggtcaagt tctcagcctc acctgaccgc gtcccttcagt  
780  
ggactgagag gggctgccga caggtctccc acgtcttcac caactttggc aagggcattc  
840  
gctacgtatc ttttgagcag tacgggagag acgtgagttc ctgggtgggg cactatggcg  
900  
cccttgtgac ccactccagt gtgagggcca ggatccgtct gtccctagcga ctggactact  
960  
gcctgacgtt gtcagtcaag accagccttg cagccagggt cagtgggtca cacctgtggg  
1020  
atctccccc tttggccttc caaaatgttg cgattatagg cgtgagccac tgtggctggc  
1080  
ctgaaatctt ctagtatcca cattcataaa gtaaaaagaa aataaaaagg catagaatgt  
1140  
caagctaacc aggcgtccgc tacttcagaa gagtgtactg tcgcatgggg agtctgtaac  
1200  
catgcttttc acttccactg catctctcgc tggctcaaaa cacgacaggt gtgtccattg  
1260  
gacaacagag agtgggaatt ccaaaagtat gggcactagg aaaagacttc ttccatcaag  
1320  
cttaattggt ttgttattca tttaatgact ttccctgctg ttacctaat acaaattgga  
1380  
tggaactgtg tttttttctg ctttgttttt tcagtttgct gtttctgtag ccatattgta  
1440  
ttctgtgtca aataaagtcc agttggattc tggaaaaaaa aa  
1482

&lt;210&gt; 1542

&lt;211&gt; 57

&lt;212&gt; PRT

<213> Homo sapiens

<400> 1542

```

Lys Gly Ile Glu Cys Gln Ala Asn Gln Ala Ser Ala Thr Ser Glu Glu
 1             5             10             15
Cys Thr Val Ala Trp Gly Val Cys Asn His Ala Phe His Phe His Cys
      20             25             30
Ile Ser Arg Trp Leu Lys Thr Arg Gln Val Cys Pro Leu Asp Asn Arg
      35             40             45
Glu Trp Glu Phe Gln Lys Tyr Gly His
 50             55

```

<210> 1543

<211> 311

<212> DNA

<213> Homo sapiens

<400> 1543

```

gctagcgatg ctactttaag gtatgcgaag ttggatgctg acgttgctc ctatcggttg
60
gagtcaaacg gacgaacaag cgttcgaggt agctttaaat gcgggcgacg ccagaaagtt
120
accaaagtcg gtgccgcgcc ttatgtttct cgaatggctc acgcgccgag gctacttget
180
ccacggctcg agccgagccg acctcgtttg ttttgaacct cgagcaccca aagacttcag
240
ccctgacgag ttcagcaaac gcaccgccgt tttcgctctc tcagatgggg tgtggcccc
300
cncnccnc c
311

```

<210> 1544

<211> 96

<212> PRT

<213> Homo sapiens

<400> 1544

```

Met Arg Ser Trp Met Leu Thr Leu Pro Pro Ile Gly Trp Ser Gln Thr
 1             5             10             15
Asp Glu Gln Ala Phe Glu Val Ala Leu Asn Ala Gly Asp Ala Arg Lys
      20             25             30
Leu Pro Lys Ser Val Pro Arg Leu Met Phe Leu Glu Trp Leu Thr Arg
      35             40             45
Arg Gly Tyr Leu Leu His Gly Ser Ser Arg Ala Asp Leu Val Cys Phe
      50             55             60
Glu Pro Arg Ala Pro Lys Asp Phe Ser Pro Asp Glu Phe Ser Lys Arg
      65             70             75             80
Thr Ala Val Phe Ala Ser Ser Asp Gly Val Trp Pro Pro Xaa Xaa Xaa
      85             90             95

```

<210> 1545

<211> 362

<212> DNA

<213> Homo sapiens



&lt;400&gt; 1545

ccatggtgcg gccgtctggt aacgataggc aaatccttgc catgccacca attcttcctt  
60  
caacagtagt tggcgaatcc ttcgatgggc aagtcctgtg agcttgetca tctgacggat  
120  
cgtctctgtc tcaagcacct cgctgtttc caggttcaag gcctggatag tgcgagtgtc  
180  
gtactgggtcg atcacttcca ccgagtgggc tgggtagccc cttgccattc gctttatgat  
240  
ctcaaccata gatgcatttg gcatgttcca gagcttgtac tccttaacga tctctctggc  
300  
gtcgtagaaa accttcacgc tatcgtcagg atgggtcact gtggtgatgt accgtccaga  
360  
ac  
362

&lt;210&gt; 1546

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1546

Met	Val	Lys	Ser	Cys	Glu	Leu	Ala	His	Leu	Thr	Asp	Arg	Leu	Cys	Leu
1				5					10					15	
Lys	His	Leu	Ala	Cys	Phe	Gln	Val	Gln	Gly	Leu	Asp	Ser	Ala	Ser	Val
			20					25					30		
Val	Leu	Val	Asp	His	Phe	His	Arg	Val	Val	Trp	Val	Ala	Pro	Cys	His
		35					40					45			
Ser	Leu	Tyr	Asp	Leu	Asn	His	Arg	Cys	Ile	Trp	His	Val	Pro	Glu	Leu
	50					55					60				
Val	Leu	Leu	Asn	Asp	Leu	Ser	Gly	Val	Val	Glu	Asn	Leu	His	Ala	Ile
65					70					75					80
Val	Arg	Met	Gly	His	Cys	Gly	Asp	Val	Pro	Ser	Arg				
				85					90						

&lt;210&gt; 1547

&lt;211&gt; 429

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1547

cgcggtgccca caccggaaga cccggccagc tcacgcctgg gtgaaagttt ctgggcggtt  
60  
ctgccgcggt cggtgtggtt cagcgccgtg tcggcggtga acctggagcg cgagcgctt  
120  
cgcaaactcg gcctgccggc ctggcactgg aagaacgccg tgctcagtgc ctggatgtac  
180  
agcgtggtgt tgtgggggggt gatgattgtc tggttgggcg cggcgggtgat tccgttcctg  
240  
atcattcagg gtgtctacgg gttctcgttg ctggaagtgg tcaactacgt cgagcactac  
300  
gggcttaaac gccagaagt gcccaacggt cgttatgaac ggtgttcgcc tcggcactcg  
360

tggaacagca accggattgt caccaatata tttctgttcc aacttcagcg gcattccgac  
 420  
 caccatgcc  
 429

<210> 1548  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 1548  
 Arg Val Ala Thr Pro Glu Asp Pro Ala Ser Ser Arg Leu Gly Glu Ser  
 1 5 10 15  
 Phe Trp Ala Phe Leu Pro Arg Ser Val Trp Phe Ser Ala Val Ser Ala  
 20 25 30  
 Trp Asn Leu Glu Arg Glu Arg Leu Arg Lys Leu Gly Leu Pro Ala Trp  
 35 40 45  
 His Trp Lys Asn Ala Val Leu Ser Ala Trp Met Tyr Ser Val Val Leu  
 50 55 60  
 Trp Gly Val Met Ile Val Trp Leu Gly Ala Ala Val Ile Pro Phe Leu  
 65 70 75 80  
 Ile Ile Gln Gly Val Tyr Gly Phe Ser Leu Leu Glu Val Val Asn Tyr  
 85 90 95  
 Val Glu His Tyr Gly Leu Lys Arg Gln Lys Leu Pro Asn Gly Arg Tyr  
 100 105 110  
 Glu Arg Cys Ser Pro Arg His Ser Trp Asn Ser Asn Arg Ile Val Thr  
 115 120 125  
 Asn Ile Phe Leu Phe Gln Leu Gln Arg His Ser Asp His His Ala  
 130 135 140

<210> 1549  
 <211> 443  
 <212> DNA  
 <213> Homo sapiens

<400> 1549  
 gtcgacaggc tccagggttc tgttttgtag tgcacccgct gtggtgcaac atgcgtctgg  
 60  
 gcacaccagc gtcgcccgtt tctgttgta gtctttcttc tctgactcca ggggtattgg  
 120  
 gtctttctgc cagcgcccat gcaactttgg cagcctggcc tgtctgctgg taagtggggc  
 180  
 agaatccctg cactccacca ttcttgggca acactcctc taggattttg gtctcccttt  
 240  
 tctctctggt ctttgaccac cgctaccag caaactcctc catctagacc agccagcatt  
 300  
 ggtttcttcc actccccag ctgcgcgctg ggaggcgcca ctgcaaactt ccttggggtc  
 360  
 tcccagctgc tcagagatcc ccatgccctt cctgatcag ctccctgccc ggttctcctc  
 420  
 ccgacgcggc tgcattgata ttc  
 443

<210> 1550

<211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 1550

```

Met Arg Thr Gly Gln Gly Ala Asp Gln Gly Arg Ala Trp Gly Ser Leu
 1             5             10             15
Ser Ser Trp Glu Thr Pro Gly Lys Phe Ala Val Ala Pro Pro Thr Arg
             20             25             30
Gln Leu Gly Glu Trp Lys Lys Pro Met Leu Ala Gly Leu Asp Gly Gly
             35             40             45
Val Cys Trp Val Ala Val Val Lys Asp Gln Arg Glu Lys Gly Asp Gln
             50             55             60
Asn Pro Arg Gly Ser Val Ala Gln Glu Trp Trp Ser Ala Gly Ile Leu
65             70             75             80
Pro His Leu Pro Ala Asp Arg Pro Gly Cys Gln Ser Cys Met Gly Ala
             85             90             95
Gly Arg Lys Thr Gln Tyr Pro Trp Ser Gln Arg Gly Lys Thr Thr Thr
             100            105            110
Gly Asn Gly Arg Arg Trp Cys Ala Gln Thr His Val Ala Pro Gln Arg
             115            120            125
Val His Tyr Lys Thr Glu Pro Trp Ser Leu Ser
             130            135

```

<210> 1551  
 <211> 306  
 <212> DNA  
 <213> Homo sapiens

<400> 1551

```

ccatggatag cccacctctg gcactcaaca tgacttggct gccacacacc aggaaacctc
60
agaggagcag ccagctggcc aagcaccctt gcccttgccc tgcgggctcc acaaaagctg
120
gaggagcaaa cgcagctcac ctctttttct gtccactgct tcagggccta ccctgtgct
180
ttggagatgg aacaaaagtg agagagctcc ctgacacacc ctcccagggc gaggatggca
240
gtccttctct ccatttggct ctaacacagc ctcccagga gaccaggggc atcccnnnnc
300
cccnnc
306

```

<210> 1552  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

<400> 1552

```

Met Asp Thr Pro Pro Leu Ala Leu Asn Met Thr Trp Leu Pro His Thr
 1             5             10             15
Arg Lys Pro Gln Arg Ser Ser Gln Leu Ala Lys His Pro Cys Pro Cys
             20             25             30
Pro Ala Gly Ser Thr Lys Ala Gly Gly Ala Asn Ala Ala His Leu Phe

```

	35					40						45					
Phe	Cys	Pro	Leu	Leu	Gln	Gly	Leu	Pro	Leu	Cys	Phe	Gly	Asp	Gly	Thr		
	50					55					60						
Lys	Val	Arg	Glu	Leu	Pro	Asp	Thr	Pro	Ser	Gln	Gly	Glu	Asp	Gly	Ser		
65					70					75					80		
Ser	Phe	Leu	His	Leu	Val	Leu	Thr	Gln	Pro	Pro	Gln	Glu	Thr	Arg	Gly		
				85					90					95			
Ile	Pro	Xaa	Pro	Xaa													
				100													

&lt;210&gt; 1553

&lt;211&gt; 657

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1553

```

atcctgcaga atgatggcgt ggtcaccagc ccctattccc ggccacgcaa ggcgggccac
60
acgctactca tcctgggggg ccagaccttc atgtgtgaca agatctacca ggtggaccac
120
aaggccaagg agatcatccc caaggccgac ctgcccagcc cccggaagga gttcagcgcc
180
tcagcgatcg gctgcaaggt ctatgtgacg gggggcaggg gctccgagaa cggggtctcc
240
aaggatgtct ggggtgtacga caccgtacat gaggaatggg ccaaggcggc gcccatgctg
300
attgcccgtt ttggccatgg ctgagctgag ctggagaact gcctctatgt ggtgggggga
360
cacacatccc tggcaggggt cttcccggcc tcgccttctg tctccctgaa acaagtggag
420
aaatacgacc ctggggccaa caagtggatg atggtggccc ccttgcgagg tggcgtcagc
480
aatgccgcag tgggtgagtgc caagctgaag ctctttgttt ttggaggaac cagcatccac
540
cgggacatgg tgtccaaggt ccagtgttat gaccctcgg agaacaggtg gacgatcaag
600
gccgagtgcc ccagccttg gcggtacaca gccgctgccg tcctgggcag ccagatc
657

```

&lt;210&gt; 1554

&lt;211&gt; 219

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1554

Ile	Leu	Gln	Asn	Asp	Gly	Val	Val	Thr	Ser	Pro	Tyr	Ser	Arg	Pro	Arg		
1			5						10					15			
Lys	Ala	Gly	His	Thr	Leu	Leu	Ile	Leu	Gly	Gly	Gln	Thr	Phe	Met	Cys		
		20						25					30				
Asp	Lys	Ile	Tyr	Gln	Val	Asp	His	Lys	Ala	Lys	Glu	Ile	Ile	Pro	Lys		
		35					40					45					
Ala	Asp	Leu	Pro	Ser	Pro	Arg	Lys	Glu	Phe	Ser	Ala	Ser	Ala	Ile	Gly		
	50					55					60						
Cys	Lys	Val	Tyr	Val	Thr	Gly	Gly	Arg	Gly	Ser	Glu	Asn	Gly	Val	Ser		

65					70					75					80
Lys	Asp	Val	Trp	Val	Tyr	Asp	Thr	Val	His	Glu	Glu	Trp	Ser	Lys	Ala
				85					90					95	
Ala	Pro	Met	Leu	Ile	Ala	Arg	Phe	Gly	His	Gly	Ser	Ala	Glu	Leu	Glu
			100					105					110		
Asn	Cys	Leu	Tyr	Val	Val	Gly	Gly	His	Thr	Ser	Leu	Ala	Gly	Val	Phe
		115					120					125			
Pro	Ala	Ser	Pro	Ser	Val	Ser	Leu	Lys	Gln	Val	Glu	Lys	Tyr	Asp	Pro
	130					135					140				
Gly	Ala	Asn	Lys	Trp	Met	Met	Val	Ala	Pro	Leu	Arg	Asp	Gly	Val	Ser
145					150					155					160
Asn	Ala	Ala	Val	Val	Ser	Ala	Lys	Leu	Lys	Leu	Phe	Val	Phe	Gly	Gly
				165					170					175	
Thr	Ser	Ile	His	Arg	Asp	Met	Val	Ser	Lys	Val	Gln	Cys	Tyr	Asp	Pro
			180					185					190		
Ser	Glu	Asn	Arg	Trp	Thr	Ile	Lys	Ala	Glu	Cys	Pro	Gln	Pro	Trp	Arg
	195					200					205				
Tyr	Thr	Ala	Ala	Ala	Val	Leu	Gly	Ser	Gln	Ile					
	210					215									

&lt;210&gt; 1555

&lt;211&gt; 328

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1555

acgcgtggga gctcgggaga gaggactctg cttctgggggt ttgaaggtga gcgtgattct  
60

ggaggagcct gccttgccgc gagcgtgtgt tgtggagagg atgcaggaca tgagtgatcc  
120

tgtaaggggtg atcgagtgtg cctcgtgaag tctggaagtc agcgagtgtg ggccgtggag  
180

gtgagccacc ggtttgtgat ttgaaactga gtgagagtgc tgtggagcgc gaaatatgtg  
240

tgtgtgtaga gtggagggtga gcgaatttgt gtgcatgtga gacggacgca atggcagagt  
300

gtagcatcct gtgttgggat tgggatttn  
328

&lt;210&gt; 1556

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1556

Met Leu His Ser Ala Ile Ala Ser Val Ser His Ala His Lys Phe Ala  
1 5 10 15

His Leu His Ser Thr His Thr His Ile Ser Arg Ser Thr Ala Leu Ser  
20 25 30

Leu Ser Phe Lys Ser Gln Thr Gly Gly Ser Pro Pro Arg Pro Thr Leu  
35 40 45

Ala Asp Phe Gln Thr Ser Arg Gly Thr Leu Asp His Pro Tyr Arg Ile  
50 55 60

Thr His Val Leu His Pro Leu His Asn Thr Arg Ser Pro Gln Gly Arg

```

65              70              75              80
Leu Leu Gln Asn His Ala His Leu Gln Thr Pro Glu Ala Glu Ser Ser
              85              90              95
Leu Pro Ser Ser His Ala
              100

```

<210> 1557  
 <211> 390  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1557
gtgcacagac ttttcgagcg ggccattaag tggtttacgt ctgggacggt ctccgctttc
60
tcgcattttt cggatcaggt caaattctgt gctcggcatt gacaggaaat tgacgtgtat
120
cagtcgattc ttgacagtgt ctggacggca ggctgaatag gctgaaagca ggacaactac
180
gaccatgccg caccatgtgg atcgtctacc gttttggcct tgccgccatt gccttgatcg
240
ccctgattgc gctgttcgtg tgccagtacc ggctatcggc caggctggcg cgccggaagc
300
gaagctcgat gggcagcagg cgcattgagga acccggcgcc attgaatcgt gaggcgctgg
360
cggagcgcgg cccgttcaaa tgcgacgcgt
390

```

<210> 1558  
 <211> 114  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1558
Met Ala Pro Gly Ser Ser Cys Ala Cys Cys Pro Ser Ser Phe Ala Ser
1      5      10      15
Gly Ala Pro Ala Trp Pro Ile Ala Gly Thr Gly Thr Arg Thr Ala Gln
20     25     30
Ser Gly Arg Ser Arg Gln Trp Arg Gln Gly Gln Asn Gly Arg Arg Ser
35     40     45
Thr Trp Cys Gly Met Val Val Val Val Leu Leu Ser Ala Tyr Ser Ala
50     55     60
Cys Arg Pro Asp Thr Ala Lys Asn Arg Leu Ile His Val Asn Phe Leu
65     70     75     80
Ser Met Pro Ser Thr Glu Phe Asp Leu Ile Arg Lys Met Arg Glu Ser
85     90     95
Gly Ala Asp Pro Arg Arg Lys Pro Leu Asn Gly Pro Leu Glu Lys Ser
100    105    110
Val His

```

<210> 1559  
 <211> 556  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1559

accggtggcg acggtatcgg tggcgcgctcg atccttgcct cggaatcctt cgctgcagag  
 60  
 ggtgagtcga agcgacccag cgtccagggtg ggcgacccgt tcatggagaa gctgctcatc  
 120  
 gagtgcaccc ttgacctctt caacgccggg gtagttgagg ccttgcagga tttcggtgcc  
 180  
 gccggaatct cctgtgccac ctccgagctg gccagtgctg gcgacggtgg catgcacgtc  
 240  
 gagctcgacc gcgttccgct gcgcgacccg aacctcgccc ctgaagagat cctcatgagc  
 300  
 gagtcccagg agcggatggc cgcggtgggtg cgccccgac agcttgaccg cttcatggag  
 360  
 atctgcgccc attgggggtgt cgctgccact gtcattggcg aggtcaccga caccggtcga  
 420  
 cttcacattg attggcaggg cgagcggatt gtcgacgtcg atccgcggac ggttgctcac  
 480  
 gacggaccgg ttctcgacat gccggccgcc cgtccgtggt ggattgatga gctcaacgag  
 540  
 aacgacgcta acgcgt  
 556

&lt;210&gt; 1560

&lt;211&gt; 185

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1560

Thr	Gly	Gly	Asp	Gly	Ile	Gly	Gly	Ala	Ser	Ile	Leu	Ala	Ser	Glu	Ser
1				5					10					15	
Phe	Ala	Ala	Glu	Gly	Glu	Ser	Lys	Arg	Pro	Ser	Val	Gln	Val	Gly	Asp
			20					25					30		
Pro	Phe	Met	Glu	Lys	Leu	Leu	Ile	Glu	Cys	Thr	Leu	Asp	Leu	Phe	Asn
		35					40					45			
Ala	Gly	Val	Val	Glu	Ala	Leu	Gln	Asp	Phe	Gly	Ala	Ala	Gly	Ile	Ser
	50					55					60				
Cys	Ala	Thr	Ser	Glu	Leu	Ala	Ser	Ala	Gly	Asp	Gly	Gly	Met	His	Val
65					70					75				80	
Glu	Leu	Asp	Arg	Val	Pro	Leu	Arg	Asp	Pro	Asn	Leu	Ala	Pro	Glu	Glu
			85						90					95	
Ile	Leu	Met	Ser	Glu	Ser	Gln	Glu	Arg	Met	Ala	Ala	Val	Val	Arg	Pro
		100						105					110		
Asp	Gln	Leu	Asp	Arg	Phe	Met	Glu	Ile	Cys	Ala	His	Trp	Gly	Val	Ala
	115						120					125			
Ala	Thr	Val	Ile	Gly	Glu	Val	Thr	Asp	Thr	Gly	Arg	Leu	His	Ile	Asp
	130					135					140				
Trp	Gln	Gly	Glu	Arg	Ile	Val	Asp	Val	Asp	Pro	Arg	Thr	Val	Ala	His
145					150					155				160	
Asp	Gly	Pro	Val	Leu	Asp	Met	Pro	Ala	Ala	Arg	Pro	Trp	Trp	Ile	Asp
			165						170					175	
Glu	Leu	Asn	Glu	Asn	Asp	Ala	Asn	Ala							
		180					185								

<210> 1561  
 <211> 466  
 <212> DNA  
 <213> Homo sapiens

<400> 1561  
 acgcgtgaaa ggtttgagag aagagagatg ccgctattga atctgctgga gttttacatc  
 60  
 ccaagatgaa gacagcattc agaattgatg tgatttcctt gaatgtggct taggaaatgt  
 120  
 ggacacttaa aactctcact tgaaattggg cacaggtttg atgtagagat aaggacgggg  
 180  
 tgcggaatgg agaccattt tgtcattgat tcatctgacc gataaggcca tagtgcagtt  
 240  
 aggtgatatt cgaaagcttc tttgatgctc tttatgtata tgttggaagg aactaccagg  
 300  
 cgttgcttta aattcccaat gtgttgtttc gttactacta atttaatacc gtaagctcta  
 360  
 ggtaaagtgc catgttggtg aactctgact gttctctttg gaattgaacg ttttgcattc  
 420  
 tcctcctgtg gctttaggtc tgacattgta tttgacctt actagt  
 466

<210> 1562  
 <211> 130  
 <212> PRT  
 <213> Homo sapiens

<400> 1562  
 Met Ser Asp Leu Lys Pro Gln Glu Glu Asp Ala Lys Arg Ser Ile Pro  
 1 5 10 15  
 Lys Arg Thr Val Arg Val Gln Gln His Gly Thr Leu Pro Arg Ala Tyr  
 20 25 30  
 Gly Ile Lys Leu Val Val Thr Lys Gln His Ile Gly Asn Leu Lys Gln  
 35 40 45  
 Arg Leu Val Val Pro Ser Asn Ile Tyr Ile Lys Ser Ile Lys Glu Ala  
 50 55 60  
 Phe Glu Tyr His Leu Thr Ala Leu Trp Pro Tyr Arg Ser Asp Glu Ser  
 65 70 75 80  
 Met Thr Lys Trp Val Ser Ile Pro His Pro Val Leu Ile Ser Thr Ser  
 85 90 95  
 Asn Leu Cys Pro Ile Ser Ser Glu Ser Phe Lys Cys Pro His Phe Leu  
 100 105 110  
 Ser His Ile Gln Gly Asn His Ile Asn Ser Glu Cys Cys Leu His Leu  
 115 120 125  
 Gly Met  
 130

<210> 1563  
 <211> 434  
 <212> DNA  
 <213> Homo sapiens

<400> 1563



ctgggggggtg tgttcggcct gctgtcgggtg tacttgccgc gttggctgca tgaacacccg  
 60  
 atcttcgctg agatgcagca gcgcaaaacc ctggctgccg agttgccatt gcgcgcggta  
 120  
 ttgcgtgacc accgtggcgc catcgtgctg tcgatgctgt tgacgtgggt gctgtcggcg  
 180  
 ggtgtgggtg tggatcatcct gatgaccccg accgtgctgc aaaccgtcta ccacttcagc  
 240  
 ccgacgggtg cgctgcaagc caacagcctg gcgatcgta cgctgagcct gggctgcatt  
 300  
 gcgtccggcg cgctggctga ccgttttggg gccggtcgcg ttttggtcac cggttggcgt  
 360  
 tgctgctggc cacttcctgg acgctgtatc acagcctgat ggcccagacg gaatggttga  
 420  
 ataagtgtac gcgt  
 434

<210> 1564  
 <211> 132  
 <212> PRT  
 <213> Homo sapiens

<400> 1564  
 Leu Gly Gly Val Phe Gly Leu Leu Ser Val Tyr Leu Pro Arg Trp Leu  
 1 5 10 15  
 His Glu Thr Pro Ile Phe Ala Glu Met Gln Gln Arg Lys Thr Leu Ala  
 20 25 30  
 Ala Glu Leu Pro Leu Arg Ala Val Leu Arg Asp His Arg Gly Ala Ile  
 35 40 45  
 Val Leu Ser Met Leu Leu Thr Trp Leu Leu Ser Ala Gly Val Val Val  
 50 55 60  
 Val Ile Leu Met Thr Pro Thr Val Leu Gln Thr Val Tyr His Phe Ser  
 65 70 75 80  
 Pro Thr Val Ala Leu Gln Ala Asn Ser Leu Ala Ile Val Thr Leu Ser  
 85 90 95  
 Leu Gly Cys Ile Ala Ser Gly Ala Leu Ala Asp Arg Phe Gly Ala Gly  
 100 105 110  
 Arg Val Leu Val Thr Gly Trp Arg Cys Cys Trp Pro Leu Pro Gly Arg  
 115 120 125  
 Cys Ile Thr Ala  
 130

<210> 1565  
 <211> 373  
 <212> DNA  
 <213> Homo sapiens

<400> 1565  
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 60  
 agagggtgag cggttctggc acctactgga ccatgaaagc aataaagagg acaaggggagc  
 120  
 ctgcattcgg ccatttcttc ccaagaatca ccataaagg tgtcaaaatc aaggaccctg  
 180

atccggtgat tctcgaagtc atcgatgagc agaacaagtt tccccccgag ggagaaaagc  
 240  
 ggggtggtgct cttgatgctc gacaacctct accgtcccag taccaccgt gcattggcga  
 300  
 acggggggcgt cccttatctg cggtcgaaga gtgtcactgt tgacctcgta gacagccggg  
 360  
 acaacacggg tac  
 373

<210> 1566

<211> 106

<212> PRT

<213> Homo sapiens

<400> 1566

Met	Ser	Gln	Arg	Val	Ser	Gly	Ser	Gly	Thr	Tyr	Trp	Thr	Met	Lys	Ala
1				5					10					15	
Ile	Lys	Arg	Thr	Arg	Glu	Pro	Ala	Phe	Gly	His	Phe	Phe	Pro	Arg	Ile
			20					25					30		
Thr	Ile	Lys	Val	Val	Lys	Ile	Lys	Asp	Pro	Asp	Pro	Val	Ile	Leu	Glu
		35					40					45			
Val	Ile	Asp	Glu	Gln	Asn	Lys	Phe	Thr	Pro	Glu	Gly	Glu	Lys	Arg	Val
		50				55					60				
Val	Leu	Leu	Met	Leu	Asp	Asn	Leu	Tyr	Arg	Pro	Ser	Thr	His	Arg	Ala
65					70					75				80	
Leu	Ala	Asn	Gly	Gly	Val	Pro	Tyr	Leu	Arg	Ser	Lys	Ser	Val	Thr	Val
			85						90					95	
Asp	Leu	Val	Asp	Ser	Arg	Asp	Asn	Thr	Gly						
			100					105							

<210> 1567

<211> 917

<212> DNA

<213> Homo sapiens

<400> 1567

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 aagccgctgc actcctgggg gaccagttt gatgcctcca ggaggataag tctgaagccg  
 120  
 ggttgggaag ggagcggaga ggcccaaaca gagcagcagg cagcgccctc tgctggcacc  
 180  
 ctggagacag cttcggctgc ggggcccctg ctttctagtc ctccccagct ttcaggacac  
 240  
 cttgacaacc tggggtcctt gcagaagtgg cccggctgtc cccaagtct cctgaagcta  
 300  
 tctgggtagg gtgggaggca gtgctgtgag ccacaaatgc aaagcagagg ggacagatgt  
 360  
 tgggactcaa agacatgagg tagagctggc cccatgggta ggtgccacca ccagagccca  
 420  
 tgaggcttcg tgttctagaa ggtggtgggt tagtgccgca ctgagggcgt gtccgggagg  
 480  
 gagcatgtgt caccagggct caggaaacag catgagtcac gacgcggggg tgtttaaggc  
 540

attcgtgcc a cagcggggac ctccggagcta tgccttgata aggcaagtga ggttacatgt  
 600  
 acgatgatgc ggtttgtgct gcagactgga aaaaagcagg ggctttgtcc tctcctgacc  
 660  
 ccctcacact ctgccttcac ggtaggctcc tgagaggggg gtctccaagg aggggtgtcag  
 720  
 tactgcagct tcagctggcg tggatggggg gcttacagga gcagcagggc tgagggagat  
 780  
 gacagcagta cgaatcgtgg ctctcctgag gcctggggtt cctcatatgt aaaatggggg  
 840  
 ttgcattaga ccataccctt ggctgtgtt taggcaaata gggatgaaag tggggccaag  
 900  
 ggctgaagag ctgggtc  
 917

<210> 1568  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 1568  
 Met Gly Pro Ala Leu Pro His Val Phe Glu Ser Gln His Leu Ser Pro  
 1 5 10 15  
 Leu Leu Cys Ile Cys Gly Ser Gln His Cys Leu Pro Pro Tyr Pro Asp  
 20 25 30  
 Ser Phe Arg Arg Leu Gly Gly Gln Pro Gly His Phe Cys Arg Asp Pro  
 35 40 45  
 Arg Leu Ser Arg Cys Pro Glu Ser Trp Gly Gly Leu Glu Gly Arg Gly  
 50 55 60  
 Pro Ala Ala Glu Ala Val Ser Arg Val Pro Ala Glu Gly Ala Ala Cys  
 65 70 75 80  
 Cys Ser Val Trp Ala Ser Pro Leu Pro Ser Gln Pro Gly Phe Arg Leu  
 85 90 95  
 Ile Leu Leu Glu Ala Ser Asn Trp Val Pro Gln Glu Cys Ser Gly Phe  
 100 105 110  
 Pro

<210> 1569  
 <211> 379  
 <212> DNA  
 <213> Homo sapiens

<400> 1569  
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 60  
 aatgcgaagc ctgctgccac catcatctgg ttccgggacg ggacgcagca ggagggcgct  
 120  
 gtggccagca cggaattgct gaaggatggg aagagggaga ccaccgtgag ccaactgctt  
 180  
 attaacccca cggacctgga catagggcgt gtcttcactt gccgaagcat gaacgaagcc  
 240  
 atccctagtg gcaaggagac ttccatcgag ctggatgtgc accaccctcc tacagtgacc  
 300

ctgtccattg agccacagac ggtgcaggag ggtgagcgtg ttgtctttac ctgccaggcc  
 360  
 acagccaacc cggagatct  
 379

<210> 1570  
 <211> 126  
 <212> PRT  
 <213> Homo sapiens

<400> 1570  
 Gly Gly Pro Val Ile Leu Leu Gln Ala Gly Thr Pro His Asn Leu Thr  
 1 5 10 15  
 Cys Arg Ala Phe Asn Ala Lys Pro Ala Ala Thr Ile Ile Trp Phe Arg  
 20 25 30  
 Asp Gly Thr Gln Gln Glu Gly Ala Val Ala Ser Thr Glu Leu Leu Lys  
 35 40 45  
 Asp Gly Lys Arg Glu Thr Thr Val Ser Gln Leu Leu Ile Asn Pro Thr  
 50 55 60  
 Asp Leu Asp Ile Gly Arg Val Phe Thr Cys Arg Ser Met Asn Glu Ala  
 65 70 75 80  
 Ile Pro Ser Gly Lys Glu Thr Ser Ile Glu Leu Asp Val His His Pro  
 85 90 95  
 Pro Thr Val Thr Leu Ser Ile Glu Pro Gln Thr Val Gln Glu Gly Glu  
 100 105 110  
 Arg Val Val Phe Thr Cys Gln Ala Thr Ala Asn Pro Glu Ile  
 115 120 125

<210> 1571  
 <211> 357  
 <212> DNA  
 <213> Homo sapiens

<400> 1571  
 tgcgcacttt tccgctcccg atgggtcccc tggncgttga tcatgcccga gatgttcac  
 60  
 atcggcatct tcttcttctt gccaaagcggc caagccgtgc tccagtcttt ccagatggaa  
 120  
 gatgcgttcg gcatgtcgac cgaatgggtc ggattggaca acttccgcaa cctgctggat  
 180  
 gacccacact acctgaattc cttccagcgc accgccgtgt tctcgggtgct ggtggcaggg  
 240  
 gtcgggateg ccgtgtcact gggctctggcg atctttgccg accccatcac tccgtcgcca  
 300  
 tgtgtacaag acacactgct gatcgtgccc tacgccgtgg cacccatgat cgccggc  
 357

<210> 1572  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 1572  
 Cys Ala Leu Phe Arg Ser Arg Trp Val Pro Trp Xaa Leu Ile Met Pro

```

      1             5             10             15
Gln Met Phe Ile Ile Gly Ile Phe Phe Phe Leu Pro Ser Gly Gln Ala
      20             25             30
Val Leu Gln Ser Phe Gln Met Glu Asp Ala Phe Gly Met Ser Thr Glu
      35             40             45
Trp Val Gly Leu Asp Asn Phe Arg Asn Leu Leu Asp Asp Pro Thr Tyr
      50             55             60
Leu Asn Ser Phe Gln Arg Thr Ala Val Phe Ser Val Leu Val Ala Gly
      65             70             75             80
Val Gly Ile Ala Val Ser Leu Gly Leu Ala Ile Phe Ala Asp Pro Ile
      85             90             95
Thr Pro Ser Pro Cys Val Gln Asp Thr Leu Leu Ile Val Pro Tyr Ala
      100             105             110
Val Ala Pro Met Ile Ala Gly
      115

```

<210> 1573  
 <211> 337  
 <212> DNA  
 <213> Homo sapiens

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<400> 1573
gaattcccat tgtcatctga ttccatgtct ggaaagaggg aagagagaca tcatgcagaa
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tattgtacag attttggaaat cggtacagtt gaaatgggaa ctttttcaga gctggacaga
120
cttttcaagg ctccatcttt ctaataaaact ggccattttt ggaattgggtt ataacacccc
180
ttggaaagag gatatccggt accattatgc tgagatcagc tcccaggtgc cccttggcaa
240
gcgacttcgg gagtacttca actctgagaa gcctgaagga cggatcatta tgacccgagt
300
gcagaaaatg aactggaaaa atgtttacta caaattt
337

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<210> 1574  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

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<400> 1574
Met Gln Asn Ile Val Gln Ile Leu Glu Ser Val Gln Leu Lys Trp Glu
1             5             10             15
Leu Phe Gln Ser Trp Thr Asp Phe Ser Arg Leu His Leu Ser Asn Lys
      20             25             30
Leu Ala Ile Phe Gly Ile Gly Tyr Asn Thr Arg Trp Lys Glu Asp Ile
      35             40             45
Arg Tyr His Tyr Ala Glu Ile Ser Ser Gln Val Pro Leu Gly Lys Arg
      50             55             60
Leu Arg Glu Tyr Phe Asn Ser Glu Lys Pro Glu Gly Arg Ile Ile Met
      65             70             75             80
Thr Arg Val Gln Lys Met Asn Trp Lys Asn Val Tyr Tyr Lys Phe
      85             90             95

```

&lt;210&gt; 1575

&lt;211&gt; 471

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1575

```

nnacgcgtca gagagatctg tgtgtcggga ggggtgcccc tcatcattga tgaccgcgta
60
catctcgttg ccgaaattgg ggccgatggg gtccatgttg ggcagtctga catgccggtc
120
gaccaggccc gtgcgattct gggcgacgat ctactcatcg gcttgtccgc tcagactccc
180
gcccattgtg aggccgcctt gtcccagggg cgtgacatcg tcgactatct gggagttggg
240
gccctgcatg gtactggaac caaacctgag gctggggagc tcggcctggc tgagattcgt
300
gatgtcgtca acgccagccc gtggccgggtg tgcgtcatcg gtgggggtgag cgcattccgat
360
gctcaagacg tagcccgggt gggatgtgac ggctgagcg tcgtctcggc gatttgccgg
420
agtaccgacc ccaagtccag tgcacgggaa cttgcggagg cgtggcgtac g
471

```

&lt;210&gt; 1576

&lt;211&gt; 157

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1576

```

Xaa Arg Val Arg Glu Ile Cys Val Ser Gly Gly Val Pro Leu Ile Ile
1      5      10      15
Asp Asp Arg Val His Leu Val Ala Glu Ile Gly Ala Asp Gly Val His
20     25     30
Val Gly Gln Ser Asp Met Pro Val Asp Gln Ala Arg Ala Ile Leu Gly
35     40     45
Asp Asp Leu Leu Ile Gly Leu Ser Ala Gln Thr Pro Ala His Val Glu
50     55     60
Ala Ala Leu Ser Gln Gly Arg Asp Ile Val Asp Tyr Leu Gly Val Gly
65     70     75     80
Ala Leu His Gly Thr Gly Thr Lys Pro Glu Ala Gly Glu Leu Gly Leu
85     90     95
Ala Glu Ile Arg Asp Val Val Asn Ala Ser Pro Trp Pro Val Cys Val
100    105    110
Ile Gly Gly Val Ser Ala Ser Asp Ala Gln Asp Val Ala Arg Val Gly
115    120    125
Cys Asp Gly Leu Ser Val Val Ser Ala Ile Cys Arg Ser Thr Asp Pro
130    135    140
Lys Ser Ser Ala Arg Glu Leu Ala Glu Ala Trp Arg Thr
145    150    155

```

&lt;210&gt; 1577

&lt;211&gt; 287

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1577

ctcgtcctcc agcgtccgat cagtgcgctc aggatgctga tcggcgggccc cttgcgcatac  
60  
ccccatcctg cgggcttgcg cacggttgcg ctccaacccg gcgtcgcgca cgcgcgcacc  
120  
ttgcgcgttg cgggggcagg cttccccgct cgcggccagc gcgccgccgg cgatctggtg  
180  
atcgagctgg agccgatgct gccgcaggcg cccgacaagc aactgcacgc gctgatcgag  
240  
cagctcgacg tggcgctcgg gaagagcgcg acacgccatt ttccgga  
287

&lt;210&gt; 1578

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1578

Leu	Val	Leu	Gln	Arg	Pro	Ile	Ser	Ala	Leu	Arg	Met	Leu	Ile	Gly	Gly
1			5						10				15		
Pro	Leu	Arg	Ile	Pro	His	Pro	Ala	Gly	Leu	Arg	Thr	Val	Ala	Leu	Glu
		20						25					30		
Pro	Gly	Val	Ala	His	Ala	Arg	Thr	Leu	Arg	Val	Ala	Gly	Ala	Gly	Phe
		35					40					45			
Pro	Ala	Arg	Gly	Gln	Arg	Ala	Ala	Gly	Asp	Leu	Val	Ile	Glu	Leu	Glu
	50					55				60					
Pro	Met	Leu	Pro	Gln	Ala	Pro	Asp	Lys	Gln	Leu	His	Ala	Leu	Ile	Glu
65				70					75					80	
Gln	Leu	Asp	Val	Ala	Leu	Gly	Lys	Ser	Ala	Thr	Arg	His	Phe	Pro	
			85						90					95	

&lt;210&gt; 1579

&lt;211&gt; 2829

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1579

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60  
cgccccctgcc tccgcggctc ggaggcgagc ggaaggtgcc ccggggccga ggccccgtgac  
120  
ggggcggggcg ggagccccgg cagtccgggg tcgccggcga gggccatgtc gctgttgggg  
180  
gaccgcctac aggccctgcc gccctcggcc gccccacgg ggccgctgct cgccccctcg  
240  
gccggcgca cctcaaccg cctgcgggag ccgctgctgc ggaggctcag cgagctcctg  
300  
gatcaggcgc ccgagggccg gggctggagg agactggcgg agctggcggg gagtcgcggg  
360  
cgccctccgc tcagttgcct agacctggag cagtgttctc ttaaggtact ggagcctgaa  
420  
ggaagcccca gcctgtgtct gctgaagtta atgggtgaaa aaggttgac agtcacagaa  
480

ttgagtgatt tcctgcaggc tatggaacac actgaagttc ttcagcttct cagcccccca  
540  
ggaataaaga ttactgtaaa cccagagtca aaggcagtct tggctggaca gtttgtgaaa  
600  
ctgtgttgcc gggcaactgg acatcctttt gttcaatatc agtggttcaa aatgaataaa  
660  
gagattccaa atggaaatac atcagagctt atttttaatg cagtgcattg aaaagatgca  
720  
ggcttttatg tctgtcgagt taataacaat ttcacctttg aattcagcca gtggtcacag  
780  
ctggatgttt gcgacatccc agagagcttc cagagaagtg ttgatggcgt ctctgaatcc  
840  
aagttgcaaa tctgtgttga accaacttcc caaaagctga tgccaggcag cacattgggt  
900  
ttacagtgtg ttgctgttgg aagccctatt cctcactacc agtggttcaa aaatgaatta  
960  
ccattaacac atgagaccaa aaagctatac atgggtgcctt atgcggattt ggaacaccaa  
1020  
ggaacctact ggtgtcatgt atataatgat cgagacagtc aagatagcaa gaaggtagaa  
1080  
atcatcatag gaagaacaga tgaggcagtg gagtgcactg aagatgaatt aaataatctt  
1140  
ggcatcctg ataataaaga gcaaacaact gaccagcctt tggcgaagga caaggttgcc  
1200  
cttttgatag gaaatatgaa ttaccgggag caccccaagc tcaaagctcc tttggtggat  
1260  
gtgtacgaat tgactaactt actgagacag ctggacttca aagtggtttc actgttggat  
1320  
cttactgaat atgagatgag taatgctgtg gatgagtttt tactcctttt agacaagggg  
1380  
gtatatgggt tattatatta tgcaggacat ggttatgaaa attttgggaa cagcttcatg  
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1500  
ctgaaattga tgcaagaaaa agaaactgga cttaatgtgt tcttattgga tatgtgtagg  
1560  
aaaagaaatg actacgatga taccattcca atcttggatg cactaaaagt caccgccaat  
1620  
attgtgtttg gatatgccac gtgtcaagga gcagaagctt ttgaaatcca gcattctgga  
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1740  
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1800  
caggctctag agattcgaag tagtttatct gagaagagag cacttactga tccaatacag  
1860  
ggaacagaat attctgctga atctcttgtg cggaatctac agtgggcaa ggctcatgaa  
1920  
cttcagaaa gtatgtgtct taagtttgac tgtggtgttc agattcaatt aggatttgca  
1980  
gctgagtttt ccaatgtcat gatcatctat acaagtatag ttacaaaacc accggagata  
2040  
ataatgtgtg atgcctacgt tactgatttt ccacttgatc tagatattga tccaaaagat  
2100



gcaaataaag gcacacctga agaaactggc agctacttgg tatcaaagga ttttcccaag  
 2160  
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 2220  
 gtatgtttat catatcagta ctcaggattg gaagatactg tagaggacaa gcaggaagtg  
 2280  
 aatgttggga aacctctcat tgctaaatta gacatgcac gaggtttggg aaggaagact  
 2340  
 tgctttcaaa cttgtcttat gtctaattgt ccttaccaga gttctgcagc cacctcagga  
 2400  
 ggagcagggc attatcactc attgcaagac ccattccatg gtgtttacca ttcacatcct  
 2460  
 ggtaatccaa gtaatgttac accagcagat agctgtcatt gcagccggac tccagatgca  
 2520  
 tttatttcaa gtttcgctca ccatgcttca tgtcatttta gtagaagtaa tgtgccagta  
 2580  
 gagacaactg atgaaatacc atttagtttc tctgacaggc tcagaatttc tgaaaaatga  
 2640  
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 2700  
 ataaagtgag acattgtgaa aaggcaaatt tgtatatgta gagaaagaat agtagtaact  
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 2820  
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<210> 1580

<211> 824

<212> PRT

<213> Homo sapiens

<400> 1580

Met	Ser	Leu	Leu	Gly	Asp	Pro	Leu	Gln	Ala	Leu	Pro	Pro	Ser	Ala	Ala
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Pro	Thr	Gly	Pro	Leu	Leu	Ala	Pro	Pro	Ala	Gly	Ala	Thr	Leu	Asn	Arg
		20					25					30			
Leu	Arg	Glu	Pro	Leu	Leu	Arg	Arg	Leu	Ser	Glu	Leu	Leu	Asp	Gln	Ala
	35					40					45				
Pro	Glu	Gly	Arg	Gly	Trp	Arg	Arg	Leu	Ala	Glu	Leu	Ala	Gly	Ser	Arg
	50					55				60					
Gly	Arg	Leu	Arg	Leu	Ser	Cys	Leu	Asp	Leu	Glu	Gln	Cys	Ser	Leu	Lys
65			70					75						80	
Val	Leu	Glu	Pro	Glu	Gly	Ser	Pro	Ser	Leu	Cys	Leu	Leu	Lys	Leu	Met
			85					90					95		
Gly	Glu	Lys	Gly	Cys	Thr	Val	Thr	Glu	Leu	Ser	Asp	Phe	Leu	Gln	Ala
	100							105					110		
Met	Glu	His	Thr	Glu	Val	Leu	Gln	Leu	Leu	Ser	Pro	Pro	Gly	Ile	Lys
	115					120						125			
Ile	Thr	Val	Asn	Pro	Glu	Ser	Lys	Ala	Val	Leu	Ala	Gly	Gln	Phe	Val
	130					135					140				
Lys	Leu	Cys	Cys	Arg	Ala	Thr	Gly	His	Pro	Phe	Val	Gln	Tyr	Gln	Trp
145				150						155				160	
Phe	Lys	Met	Asn	Lys	Glu	Ile	Pro	Asn	Gly	Asn	Thr	Ser	Glu	Leu	Ile

																165																	170																	175
Phe	Asn	Ala	Val	His	Val	Lys	Asp	Ala	Gly	Phe	Tyr	Val	Cys	Arg	Val																																			
																180																	185																	190
Asn	Asn	Asn	Phe	Thr	Phe	Glu	Phe	Ser	Gln	Trp	Ser	Gln	Leu	Asp	Val																																			
																195																	200																	205
Cys	Asp	Ile	Pro	Glu	Ser	Phe	Gln	Arg	Ser	Val	Asp	Gly	Val	Ser	Glu																																			
																210																	215																	220
Ser	Lys	Leu	Gln	Ile	Cys	Val	Glu	Pro	Thr	Ser	Gln	Lys	Leu	Met	Pro																																			
																225																	230																	235
Gly	Ser	Thr	Leu	Val	Leu	Gln	Cys	Val	Ala	Val	Gly	Ser	Pro	Ile	Pro																																			
																245																	250																	255
His	Tyr	Gln	Trp	Phe	Lys	Asn	Glu	Leu	Pro	Leu	Thr	His	Glu	Thr	Lys																																			
																260																	265																	270
Lys	Leu	Tyr	Met	Val	Pro	Tyr	Ala	Asp	Leu	Glu	His	Gln	Gly	Thr	Tyr																																			
																275																	280																	285
Trp	Cys	His	Val	Tyr	Asn	Asp	Arg	Asp	Ser	Gln	Asp	Ser	Lys	Lys	Val																																			
																290																	295																	300
Glu	Ile	Ile	Ile	Gly	Arg	Thr	Asp	Glu	Ala	Val	Glu	Cys	Thr	Glu	Asp																																			
																305																	310																	315
Glu	Leu	Asn	Asn	Leu	Gly	His	Pro	Asp	Asn	Lys	Glu	Gln	Thr	Thr	Asp																																			
																325																	330																	335
Gln	Pro	Leu	Ala	Lys	Asp	Lys	Val	Ala	Leu	Leu	Ile	Gly	Asn	Met	Asn																																			
																340																	345																	350
Tyr	Arg	Glu	His	Pro	Lys	Leu	Lys	Ala	Pro	Leu	Val	Asp	Val	Tyr	Glu																																			
																355																	360																	365
Leu	Thr	Asn	Leu	Leu	Arg	Gln	Leu	Asp	Phe	Lys	Val	Val	Ser	Leu	Leu																																			
																370																	375																	380
Asp	Leu	Thr	Glu	Tyr	Glu	Met	Arg	Asn	Ala	Val	Asp	Glu	Phe	Leu	Leu																																			
																385																	390																	395
Leu	Leu	Asp	Lys	Gly	Val	Tyr	Gly	Leu	Leu	Tyr	Tyr	Ala	Gly	His	Gly																																			
																405																	410																	415
Tyr	Glu	Asn	Phe	Gly	Asn	Ser	Phe	Met	Val	Pro	Val	Asp	Ala	Pro	Asn																																			
																420																	425																	430
Pro	Tyr	Arg	Ser	Glu	Asn	Cys	Leu	Cys	Val	Gln	Asn	Ile	Leu	Lys	Leu																																			
																435																	440																	445
Met	Gln	Glu	Lys	Glu	Thr	Gly	Leu	Asn	Val	Phe	Leu	Leu	Asp	Met	Cys																																			
																450																	455																	460
Arg	Lys	Arg	Asn	Asp	Tyr	Asp	Asp	Thr	Ile	Pro	Ile	Leu	Asp	Ala	Leu																																			
																465																	470																	475
Lys	Val	Thr	Ala	Asn	Ile	Val	Phe	Gly	Tyr	Ala	Thr	Cys	Gln	Gly	Ala																																			
																485																	490																	495
Glu	Ala	Phe	Glu	Ile	Gln	His	Ser	Gly	Leu	Ala	Asn	Gly	Ile	Phe	Met																																			
																500																	505																	510
Lys	Phe	Leu	Lys	Asp	Arg	Leu	Leu	Asp	Lys	Lys	Ile	Thr	Val	Leu																																				
																515																	520																	525
Leu	Asp	Glu	Val	Ala	Glu	Asp	Met	Gly	Lys	Cys	His	Leu	Thr	Lys	Gly																																			
																530																	535																	540
Lys	Gln	Ala	Leu	Glu	Ile	Arg	Ser	Ser	Leu	Ser	Glu	Lys	Arg	Ala	Leu																																			
																545																	550																	555
Thr	Asp	Pro	Ile	Gln	Gly	Thr	Glu	Tyr	Ser	Ala	Glu	Ser	Leu																																					

595	600	605
Ser Asn Val Met Ile Ile Tyr Thr Ser Ile Val Tyr Lys Pro Pro Glu		
610	615	620
Ile Ile Met Cys Asp Ala Tyr Val Thr Asp Phe Pro Leu Asp Leu Asp		
625	630	635
Ile Asp Pro Lys Asp Ala Asn Lys Gly Thr Pro Glu Glu Thr Gly Ser		
645	650	655
Tyr Leu Val Ser Lys Asp Leu Pro Lys His Cys Leu Tyr Thr Arg Leu		
660	665	670
Ser Ser Leu Gln Lys Leu Lys Glu His Leu Val Phe Thr Val Cys Leu		
675	680	685
Ser Tyr Gln Tyr Ser Gly Leu Glu Asp Thr Val Glu Asp Lys Gln Glu		
690	695	700
Val Asn Val Gly Lys Pro Leu Ile Ala Lys Leu Asp Met His Arg Gly		
705	710	715
Leu Gly Arg Lys Thr Cys Phe Gln Thr Cys Leu Met Ser Asn Gly Pro		
725	730	735
Tyr Gln Ser Ser Ala Ala Thr Ser Gly Gly Ala Gly His Tyr His Ser		
740	745	750
Leu Gln Asp Pro Phe His Gly Val Tyr His Ser His Pro Gly Asn Pro		
755	760	765
Ser Asn Val Thr Pro Ala Asp Ser Cys His Cys Ser Arg Thr Pro Asp		
770	775	780
Ala Phe Ile Ser Ser Phe Ala His His Ala Ser Cys His Phe Ser Arg		
785	790	795
Ser Asn Val Pro Val Glu Thr Thr Asp Glu Ile Pro Phe Ser Phe Ser		
805	810	815
Asp Arg Leu Arg Ile Ser Glu Lys		
820		

&lt;210&gt; 1581

&lt;211&gt; 426

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1581

gatccgcatc gcccgtttat tgacgaggtg accttcaccc gagagggcca tacctatcac

60

cggtgccccg aggtggctga cgcctggctc gattcgggct cgatgccctt cgcccagtgg

120

ggatacccgatc atgtgccccg ttcgaaggag aagttcgagt ccactaccc ggggtgacttc

180

atctgtgagg ccatcgacca gacccgcggg tggttttaca ccatgatggc cgtcgggaacc

240

ctggtgtttg acgagtcctc gtaccgcaat gtgctgtgtc tgggccacat cttggccgag

300

gacggtcgca agatgagcaa gcaccttggc aacatcctgt tgcctatccc gctcatggat

360

tcccacggtg ccgacgcgct gcgttggttc atggcgccg acggctcccc atggagtgc

420

cgacgc

426

&lt;210&gt; 1582

<211> 142  
 <212> PRT  
 <213> Homo sapiens

<400> 1582  
 Asp Pro His Arg Pro Phe Ile Asp Glu Val Thr Phe Thr Arg Glu Gly  
 1 5 10 15  
 His Thr Tyr His Arg Val Pro Glu Val Ala Asp Ala Trp Leu Asp Ser  
 20 25 30  
 Gly Ser Met Pro Phe Ala Gln Trp Gly Tyr Pro His Val Pro Gly Ser  
 35 40 45  
 Lys Glu Lys Phe Glu Ser His Tyr Pro Gly Asp Phe Ile Cys Glu Ala  
 50 55 60  
 Ile Asp Gln Thr Arg Gly Trp Phe Tyr Thr Met Met Ala Val Gly Thr  
 65 70 75 80  
 Leu Val Phe Asp Glu Ser Ser Tyr Arg Asn Val Leu Cys Leu Gly His  
 85 90 95  
 Ile Leu Ala Glu Asp Gly Arg Lys Met Ser Lys His Leu Gly Asn Ile  
 100 105 110  
 Leu Leu Pro Ile Pro Leu Met Asp Ser His Gly Ala Asp Ala Leu Arg  
 115 120 125  
 Trp Phe Met Ala Ala Asp Gly Ser Pro Trp Ser Ala Arg Arg  
 130 135 140

<210> 1583  
 <211> 450  
 <212> DNA  
 <213> Homo sapiens

<400> 1583  
 nnacgcgtga agggttatgg agatgggttca gggagtaagg aaggtttcag ggatgggttta  
 60  
 ggggggttctg aggaaatggg gtcaatggat gaggcagggt ataggaagga tttgggggct  
 120  
 cctaaggga taggttcagg gagtaaggca ggtttcaggg atggtttagg gagttctggg  
 180  
 gaaatgggg caatggatga ggcagattat aggaaggatt tgggagctcc tgaggaaatg  
 240  
 ggttcaggca gttacacaga ttacaggaat ggtttaggca gttctggaaa aatcagttca  
 300  
 ggggatgagg caggttataa gaatgtttta ggggggttctg ggaggaatcc attagggagc  
 360  
 gaggcagggt ctaggggtag tttggaggat tctgggtaca tcttgatcga gaatgaggca  
 420  
 ggttctaggc aaggctttgg gggaactagt  
 450

<210> 1584  
 <211> 150  
 <212> PRT  
 <213> Homo sapiens

<400> 1584  
 Xaa Arg Val Lys Gly Tyr Gly Asp Gly Ser Gly Ser Lys Glu Gly Phe

1	5	10	15
Arg Asp Gly Leu Gly Gly Ser Glu Glu Met Gly Ser Met Asp Glu Ala			
	20	25	30
Gly Tyr Arg Lys Asp Leu Gly Ala Pro Lys Gly Ile Gly Ser Gly Ser			
	35	40	45
Lys Ala Gly Phe Arg Asp Gly Leu Gly Ser Ser Gly Glu Met Gly Ser			
	50	55	60
Met Asp Glu Ala Asp Tyr Arg Lys Asp Leu Gly Ala Pro Glu Glu Met			
65	70	75	80
Gly Ser Gly Ser Tyr Thr Asp Tyr Arg Asn Gly Leu Gly Ser Ser Gly			
	85	90	95
Lys Ile Ser Ser Gly Asp Glu Ala Gly Tyr Lys Asn Val Leu Gly Gly			
	100	105	110
Ser Gly Arg Asn Pro Leu Gly Ser Glu Ala Gly Ser Arg Gly Ser Leu			
	115	120	125
Glu Asp Ser Gly Tyr Ile Leu Ser Trp Asn Glu Ala Gly Ser Arg Gln			
	130	135	140
Gly Phe Gly Gly Thr Ser			
145	150		

&lt;210&gt; 1585

&lt;211&gt; 596

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1585

tgatcatctg taattcttgt ccgtgggcgt ttgaactgag aatgtcttaa gaagttggga  
 60  
 tctaataccga gctgctgctg gcaaagttgg gtgaggtctg cagagagtgc gtccatctgt  
 120  
 ggagctgca gggcaagctg gggaggaagc gcagggtgtt gcacaggttg catcataatg  
 180  
 gaaggaaaaga gcggcaggtc cagagaaaacc ggcctctccc aaaaagttat caaacactgg  
 240  
 tttagaaata cgcttttttaa ggaacgacag agaaataaaag attcaccata caacttcagt  
 300  
 aaccctccta taacggtttt agaagatatt agaattgatc cacagcccac ctctttagaa  
 360  
 cattacaaat ctgatgcatt attcagtaaa aggtcttcta gaacgagatt tactgactac  
 420  
 cagcttaggg ttctgcaaga cttttttgac acaaacgctt acccaaaaga tgatgaaata  
 480  
 gaacaactct ccactgttct caatctgcct acccggtta ttgttgatg gttccagaat  
 540  
 gtcgtcaga aagcacgaaa gagttatgag aatcaagcag aaacccttc acgcgt  
 596

&lt;210&gt; 1586

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1586

Met Glu Gly Lys Ser Gly Arg Ser Arg Glu Thr Gly Leu Ser Gln Lys

1				5					10					15			
Val	Ile	Lys	His	Trp	Phe	Arg	Asn	Thr	Leu	Phe	Lys	Glu	Arg	Gln	Arg		
			20					25					30				
Asn	Lys	Asp	Ser	Pro	Tyr	Asn	Phe	Ser	Asn	Pro	Pro	Ile	Thr	Val	Leu		
		35					40					45					
Glu	Asp	Ile	Arg	Ile	Asp	Pro	Gln	Pro	Thr	Ser	Leu	Glu	His	Tyr	Lys		
	50					55					60						
Ser	Asp	Ala	Ser	Phe	Ser	Lys	Arg	Ser	Ser	Arg	Thr	Arg	Phe	Thr	Asp		
65					70				75					80			
Tyr	Gln	Leu	Arg	Val	Leu	Gln	Asp	Phe	Phe	Asp	Thr	Asn	Ala	Tyr	Pro		
			85					90					95				
Lys	Asp	Asp	Glu	Ile	Glu	Gln	Leu	Ser	Thr	Val	Leu	Asn	Leu	Pro	Thr		
		100						105				110					
Arg	Val	Ile	Val	Val	Trp	Phe	Gln	Asn	Ala	Arg	Gln	Lys	Ala	Arg	Lys		
		115					120					125					
Ser	Tyr	Glu	Asn	Gln	Ala	Glu	Thr	Pro	Ser	Arg							
	130						135										

&lt;210&gt; 1587

&lt;211&gt; 501

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1587

tgtacacaca gtgatttggg gtcctttttc ctaaaacagc ttcttttatca ggactttgga  
 60  
 attctgggtg agatagaaac actgaaaaca gggcggaagt tttttcttct ggcttcttag  
 120  
 tccacggagg gctcagcgtg gagaggatat gccgtggcat tctccctggg agaccacaca  
 180  
 tggtcccgac agctcagacc ccagaccgca tgtgctcctg acagctcaga cccagaccg  
 240  
 cgcgtgctcc tgacagctca gacccagac cgcaggtgct cccgacagct cagacccag  
 300  
 accgcgggtg ctctgacag ctcagacccc agaccgcgcg tgctcccgac agctcagacc  
 360  
 ccagaccgcg ggtgctcctg acagctcaga cccagaccg cgcgtgctcc cgacagctca  
 420  
 gacccagac cgcgggtgct cctgacagct cagacccag accgcgggtg ctctgacag  
 480  
 ctcagacccc agaccacgcg t  
 501

&lt;210&gt; 1588

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1588

Ser	Thr	Glu	Gly	Ser	Ala	Trp	Arg	Gly	Tyr	Ala	Val	Ala	Phe	Ser	Leu		
1				5				10					15				
Gly	Asp	His	Thr	Cys	Ser	Arg	Gln	Leu	Arg	Pro	Gln	Thr	Ala	Cys	Ala		
		20				25						30					
Pro	Asp	Ser	Ser	Asp	Pro	Arg	Pro	Arg	Val	Leu	Leu	Thr	Ala	Gln	Thr		

<400> 1590															
Lys	Leu	Ala	Gly	Asp	Thr	Leu	Phe	Thr	Gly	Pro	Arg	Gly	Gly	Gly	Val
1				5					10					15	
Thr	Cys	Ile	Asp	Ser	Thr	Gly	Ser	Thr	Asn	Ala	Asp	Met	Ala	Ala	Phe
			20					25					30		
Val	Arg	Ala	Gly	Gly	Thr	Ser	Phe	Cys	Leu	Leu	Val	Ala	Asp	His	Gln
		35					40					45			
Glu	Gly	Gly	Arg	Gly	Arg	Phe	Thr	Arg	Ser	Trp	Gln	Asp	Val	Pro	Gly
	50					55				60					
Thr	Ser	Leu	Ala	Ile	Ser	Ala	Leu	Val	Pro	Asn	Asp	Arg	Pro	Ser	Gln
65					70					75					80
Asp	Trp	Gly	Trp	Leu	Ser	Met	Val	Ala	Gly	Leu	Ala	Val	Val	Lys	Val
				85					90					95	
Ile	Lys	Glu	Val	Gly	Gly	Ala	Asp	Arg	Ser	Arg	Val	Thr	Leu	Lys	Trp
			100					105					110		
Pro	Asn	Asp	Val	Leu	Val	Asp	Leu	Asp	Thr	Asp	Gln	Gly	Gly	Lys	Val
		115					120					125			
Cys	Gly	Ile	Leu	Ser	Glu	Arg									
	130					135									

<210> 1591  
 <211> 424  
 <212> DNA  
 <213> Homo sapiens

<400> 1591  
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 60  
 ttcagagagg cacttgcacc tagaggagtc tctgggaagc agatggggat atgggacaga  
 120  
 cgcattcttga aaaagccccc agatgcctcc ctatggagga cctcaccac ccacatcacc  
 180  
 agtagggagc ttgggactta ccctaaccac aggggggtga ctgttgctgt ccttgcacag  
 240  
 aacgtccagc gagtcttgac tttccagccg ctgcgcttca tccaggagca cgtcctgac  
 300  
 cctgtctttg acctcagcgg cccagcagc ctggcccagc ctgtccagta ctcccttgac  
 360  
 tgtgggatcc ctggctgtc acgcccctga ggacccctcg gatctgtccc agcacgtgaa  
 420  
 attt  
 424

<210> 1592  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

<400> 1592  
 Met Gly Ile Trp Asp Arg Arg Ile Leu Lys Lys Pro Pro Asp Ala Ser  
 1 5 10 15  
 Leu Trp Arg Thr Ser Pro Thr His Ile Thr Ser Arg Glu Leu Gly Thr  
 20 25 30  
 Tyr Pro Asn His Arg Gly Val Thr Val Val Val Pro Ala Gln Asn Val  
 35 40 45  
 Gln Arg Val Leu Thr Phe Gln Pro Leu Arg Phe Ile Gln Glu His Val  
 50 55 60  
 Leu Ile Pro Val Phe Asp Leu Ser Gly Pro Ser Ser Leu Ala Gln Pro  
 65 70 75 80  
 Val Gln Tyr Ser Leu Asp Cys Gly Ile Pro Gly Cys Ser Arg Pro  
 85 90 95

<210> 1593  
 <211> 1678  
 <212> DNA  
 <213> Homo sapiens

<400> 1593  
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 60  
 atgagaaatg agccattga aggcaaacctc tctactgtata ggcaacaggc atctatcatt  
 120  
 tcccgtaaaa aagaagccaa agctgaggaa cttcaggagg ccaaggagaa gttagccagc  
 180



ctagagagag aagcatcagt aaagagaaat cagacccgtg aatttgatgg tactgaagtt  
240  
ttaaagggag atgagttcaa acgatatgtc aataaacttc gaagcaagag tacagttttc  
300  
aaaaagaagc atcacataat agctgaactt aaagctgaat tcggtctttt gcagaggact  
360  
gaagaacttc ttaagcaacg tcatgaaaat attcaacaac aactgcaaac tatggaggag  
420  
aaaaagggta tatctggata tagttacacc caagaagagc tagaaagagt atctgcactg  
480  
aagagtgaag ttgatgaaat gaaaggacga acattggatg atatgtctga aatggtgaaa  
540  
aaactgtatt cattgggtatc tgaaaagaag tcagctcttg cctcagttat aaaagagcta  
600  
cgacagttgc gtcaaaaaata tcaagaactg acccaggagt gtgatgaaaa gaaatcccag  
660  
tatgatagct gtgcagcagg cctcgaaagc aatcgggtcca aattagaaca ggaagttaga  
720  
agactccgtg aagaatgtct tcaagaagaa agtagatacc attatacaaa ttgtatgatt  
780  
aagaacctag aagttcaact tcgtcgtgct actgatgaga tgaaggcata tatctcttct  
840  
gatcaacaag aaaaaagaaa ggcaattagg gaacagtata ccaaaaatac tgctgaacaa  
900  
gaaaaccttg gaaagaaact tcgggaaaaa caaaaagtta tacgagaaag tcatgggtcca  
960  
aatatgaaac aagcaaaaat gtggcgtgat ttggaacaat taatggaatg taagaaacag  
1020  
tgctttctga aacaacaaag ccaaacttcc attgggtcagg taattcagga ggggtggggag  
1080  
gaccggctaa tactgtgaat tcttgtgtca tcgtttgggg ttttacttga taccactagc  
1140  
tataagccta atctcataat gtattttctt tttgaaactg atttgttttag cattttgttt  
1200  
tcagaagagc cattctttat taagttttca tagaaaataa tgtaaggta gatttagttt  
1260  
gaatgttttt tcatatgaaa aagaggcttt tattcttttc catagttagg acatcactgg  
1320  
cgtcttctga gttttatgag acaggaaact aagtttacta tctgtaaatg taaacatatg  
1380  
tccattaaga aacatgtagt ttttttttag aatgtaataa ccagtggtt tactgttttt  
1440  
cttaatctct tttaaaaaaa ctttagaaga atcttttagg aactaatatc tcttgttctg  
1500  
aagaaacatt tatctgacgt tcagcagttc ctacagtttt acttcagttt atttttcttc  
1560  
tgtaaaatgc aagaaaattt aatattttga ctaacatgtc ttttctgttt gtatcattta  
1620  
aaggcaaata aacttggtac gtatttcata tctatttaaa aaatgaaaaa aaaaaaaa  
1678

&lt;210&gt; 1594

&lt;211&gt; 365

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1594

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Leu Glu Ser Lys Ile Asn Glu Ile Asn Thr Glu Ile Asn Gln Leu Ile
 1           5           10           15
Glu Lys Lys Met Met Arg Asn Glu Pro Ile Glu Gly Lys Leu Ser Leu
          20           25           30
Tyr Arg Gln Gln Ala Ser Ile Ile Ser Arg Lys Lys Glu Ala Lys Ala
          35           40           45
Glu Glu Leu Gln Glu Ala Lys Glu Lys Leu Ala Ser Leu Glu Arg Glu
          50           55           60
Ala Ser Val Lys Arg Asn Gln Thr Arg Glu Phe Asp Gly Thr Glu Val
65           70           75           80
Leu Lys Gly Asp Glu Phe Lys Arg Tyr Val Asn Lys Leu Arg Ser Lys
          85           90           95
Ser Thr Val Phe Lys Lys Lys His His Ile Ile Ala Glu Leu Lys Ala
          100          105          110
Glu Phe Gly Leu Leu Gln Arg Thr Glu Glu Leu Leu Lys Gln Arg His
          115          120          125
Glu Asn Ile Gln Gln Gln Leu Gln Thr Met Glu Glu Lys Lys Gly Ile
          130          135          140
Ser Gly Tyr Ser Tyr Thr Gln Glu Glu Leu Glu Arg Val Ser Ala Leu
145          150          155          160
Lys Ser Glu Val Asp Glu Met Lys Gly Arg Thr Leu Asp Asp Met Ser
          165          170          175
Glu Met Val Lys Lys Leu Tyr Ser Leu Val Ser Glu Lys Lys Ser Ala
          180          185          190
Leu Ala Ser Val Ile Lys Glu Leu Arg Gln Leu Arg Gln Lys Tyr Gln
          195          200          205
Glu Leu Thr Gln Glu Cys Asp Glu Lys Lys Ser Gln Tyr Asp Ser Cys
          210          215          220
Ala Ala Gly Leu Glu Ser Asn Arg Ser Lys Leu Glu Gln Glu Val Arg
225          230          235          240
Arg Leu Arg Glu Glu Cys Leu Gln Glu Glu Ser Arg Tyr His Tyr Thr
          245          250          255
Asn Cys Met Ile Lys Asn Leu Glu Val Gln Leu Arg Arg Ala Thr Asp
          260          265          270
Glu Met Lys Ala Tyr Ile Ser Ser Asp Gln Gln Glu Lys Arg Lys Ala
          275          280          285
Ile Arg Glu Gln Tyr Thr Lys Asn Thr Ala Glu Gln Glu Asn Leu Gly
          290          295          300
Lys Lys Leu Arg Glu Lys Gln Lys Val Ile Arg Glu Ser His Gly Pro
305          310          315          320
Asn Met Lys Gln Ala Lys Met Trp Arg Asp Leu Glu Gln Leu Met Glu
          325          330          335
Cys Lys Lys Gln Cys Phe Leu Lys Gln Ser Gln Thr Ser Ile Gly
          340          345          350
Gln Val Ile Gln Glu Gly Gly Glu Asp Arg Leu Ile Leu
          355          360          365

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&lt;210&gt; 1595

&lt;211&gt; 559

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1595

accggtcccc ctcacaggcc cacacctgct tctcctcctg gggcagggca gcctgggtggg  
 60  
 gcatggccgg ggagccgccc acttggcgag gaacaggctc catagcgacc tcagaacact  
 120  
 ggtgctgggg cccagccagg gagagcatct tcccgtggg accttccccg gggcggtca  
 180  
 tcccttgagg atgtaggggtg cagctgagat ggtggcggcc ccattcctgc tgttcgccag  
 240  
 cctgggctgg ggggtactagg atcacccttg ggctgatgag gagcccgggt cttgggcagt  
 300  
 taccaagtgg ggggtcacag tctggaaagt ggtggaacca agggagcggc ctcgcccagg  
 360  
 ccacactctc aaatactggc cctcgacaaa aggcagctgg gctctcaaga cagggccacc  
 420  
 tcctctctgc tgggccccgcg cccgtggaga gcaagtggga actgacccta tcttctgtcc  
 480  
 cagcttgagg agccagcatc aaggtcaggc ctcacttgcc caagaaagag gagtgaggag  
 540  
 gccactgga ggaacgcgt  
 559

&lt;210&gt; 1596

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1596

Met	Leu	Ala	Leu	Gln	Ala	Gly	Thr	Glu	Asp	Arg	Val	Ser	Ser	His	Leu
1			5					10						15	
Leu	Ser	Thr	Gly	Ala	Gly	Pro	Ala	Glu	Arg	Arg	Trp	Pro	Cys	Leu	Glu
		20						25					30		
Ser	Pro	Ala	Ala	Phe	Cys	Arg	Gly	Pro	Val	Phe	Glu	Ser	Val	Ala	Trp
		35					40					45			
Ala	Arg	Pro	Leu	Pro	Trp	Phe	His	His	Phe	Pro	Asp	Cys	Asp	Pro	Pro
		50				55					60				
Leu	Gly	Asn	Cys	Pro	Arg	Pro	Gly	Leu	Leu	Ile	Ser	Pro	Arg	Val	Ile
65					70					75				80	
Leu	Val	Pro	Pro	Ala	Gln	Ala	Gly	Glu	Gln	Gln	Glu	Trp	Gly	Arg	His
			85						90					95	
His	Leu	Ser	Cys	Thr	Leu	His	Leu	Gln	Gly	Met	Ser	Arg	Pro	Gly	Glu
			100					105						110	
Gly	Pro	Ser	Gly	Lys	Met	Leu	Ser	Leu	Ala	Gly	Pro	Gln	His	Gln	Cys
		115					120					125			
Ser	Glu	Val	Ala	Met	Glu	Pro	Val	Pro	Arg	Gln	Val	Gly	Gly	Ser	Pro
		130				135					140				
Ala	Met	Pro	His	Gln	Ala	Ala	Leu	Pro	Gln	Glu	Glu	Lys	Gln	Val	Trp
145					150					155					160
Ala	Cys	Glu	Arg	Asp	Arg										
					165										

&lt;210&gt; 1597

&lt;211&gt; 609

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1597

tcgtcaacgg aaacttcggc cttcgggcct acccataatc cttgggacct tgaacgggta  
60  
ccgggtgggtt ccgggtgggtg ttcagcagct agcttggtt cctttcaggc cccgttggct  
120  
ttgggcaactg ataccggggg ctcgatccgc caacctggag cggtgaccgg caccgtcggg  
180  
atcaagccga cctacgggtc gacctccga tacggcggtta tcgctatggc ttcattcttg  
240  
gataactctg ggccctgcgc ccgtaccgtc cttgacgccg cgttgctcca tcaggccatt  
300  
gccggtcacg acgctatgga ccagaccacg attaatcagc ccaccccggc ggtcgttgag  
360  
gctgcgcggc aggcagacgt ttccgggggtg cgcattggcg ttgtcacgga gttgagcggg  
420  
cagggttacg accctcaggt cgaggcccg ttccacgagg ctgtcgagat gctaatagag  
480  
gcgggggctg aggtcgttga ggtctcttgc ccgaactttg acctcgctt acctgcttat  
540  
taccttattc agcctgccga ggtgtctagc aacctggctc gttacgacgc catgcgttac  
600  
ggcttacgc  
609

&lt;210&gt; 1598

&lt;211&gt; 203

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1598

Ser	Ser	Thr	Glu	Thr	Ser	Ala	Phe	Gly	Pro	Thr	His	Asn	Pro	Trp	Asp
1				5					10					15	
Leu	Glu	Arg	Val	Pro	Gly	Gly	Ser	Gly	Gly	Gly	Ser	Ala	Ala	Ser	Leu
			20					25					30		
Ala	Ser	Phe	Gln	Ala	Pro	Leu	Ala	Leu	Gly	Thr	Asp	Thr	Gly	Gly	Ser
			35				40					45			
Ile	Arg	Gln	Pro	Gly	Ala	Val	Thr	Gly	Thr	Val	Gly	Ile	Lys	Pro	Thr
	50					55					60				
Tyr	Gly	Ser	Thr	Ser	Arg	Tyr	Gly	Val	Ile	Ala	Met	Ala	Ser	Ser	Leu
65					70				75						80
Asp	Thr	Pro	Gly	Pro	Cys	Ala	Arg	Thr	Val	Leu	Asp	Ala	Ala	Leu	Leu
			85					90						95	
His	Gln	Ala	Ile	Ala	Gly	His	Asp	Ala	Met	Asp	Gln	Thr	Thr	Ile	Asn
			100					105						110	
Gln	Pro	Thr	Pro	Ala	Val	Val	Glu	Ala	Ala	Arg	Gln	Ala	Asp	Val	Ser
			115				120						125		
Gly	Val	Arg	Ile	Gly	Val	Val	Thr	Glu	Leu	Ser	Gly	Gln	Gly	Tyr	Asp
	130					135					140				
Pro	Gln	Val	Glu	Ala	Arg	Phe	His	Glu	Ala	Val	Glu	Met	Leu	Ile	Glu
145					150					155					160
Ala	Gly	Ala	Glu	Val	Val	Glu	Val	Ser	Cys	Pro	Asn	Phe	Asp	Leu	Ala

```

      165      170      175
Leu Pro Ala Tyr Tyr Leu Ile Gln Pro Ala Glu Val Ser Ser Asn Leu
      180      185      190
Ala Arg Tyr Asp Ala Met Arg Tyr Gly Leu Arg
      195      200

```

```
<210> 1599
<211> 526
<212> DNA
<213> Homo sapiens
```

```
<400> 1599
gcgtggccga cggctgctgt gtggtcagcg atctttattt ttcttgatcg attcagaacc
60
cggcacctgc acgtgtggtt tctctgcttt tgttggggag cgtgcgctgc gacctggatt
120
agcatgcacg tgaacacgtg gatggccggg atgctctcgg tgacaggtgg ggttgatcca
180
gcatcggggc ccggtccggc agtgtattcg gctccctttg ttgaggaatc atgcaaggcg
240
cttgtgcttt tcgcgctggc catcggcatg gggcgacgga tgacctcggg agttcagacg
300
gtgagcatgg ccgggctctc ggcaattggt ttgcgccttg ttgagaacat tatgtactac
360
gcccgtgcag ataactacgc ccgtgtgacg gcttcgggtg gggaccccaa acaaggcggt
420
gatgaagttg gtgctgttgc ggggagtgtg tgcctcgctt gggcatccgc tgttcaccag
480
catgacgggt atcgggtctgg cccttgggct gaggtcacga agttga
526
```

```
<210> 1600
<211> 134
<212> PRT
<213> Homo sapiens
```

```

<400> 1600
Met His Val Asn Thr Trp Met Ala Gly Met Leu Ser Val Thr Gly Gly
  1                    5                10                15
Val Asp Pro Ala Ser Gly Ala Gly Pro Ala Val Tyr Ser Ala Pro Phe
          20                25                30
Val Glu Glu Ser Cys Lys Ala Leu Val Leu Phe Ala Leu Ala Ile Gly
          35                40                45
Met Gly Arg Arg Met Thr Ser Val Val Gln Thr Val Ser Met Ala Gly
  50                55                60
Leu Ser Ala Ile Gly Phe Ala Phe Val Glu Asn Ile Met Tyr Tyr Ala
65          70                75                80
Arg Ala Asp Asn Tyr Ala Arg Val Thr Ala Ser Gly Gly Asp Pro Lys
          85                90                95
Gln Gly Val Asp Glu Val Gly Ala Val Ala Gly Ser Val Cys Leu Val
          100                105                110
Trp Ala Ser Ala Val His Gln His Asp Gly Tyr Arg Ser Gly Pro Trp
          115                120                125
Ala Glu Val Thr Lys Leu

```

130

<210> 1601  
 <211> 447  
 <212> DNA  
 <213> Homo sapiens

<400> 1601  
 gccggccgcc ccgtttccgc agattctgga ggagtgccga tggccgagtt catctacacc  
 60  
 atgcacaacg tccgaaaggc ggtgggtgac aaagttatcc ttgacaatgt cacgctgtcg  
 120  
 ttcttcccg ggcgaagat tgggtgtgtc ggaccgaatg gcgctggcaa atcgacgatg  
 180  
 ctcaagctca tggctggtct cgataagccc aataacggcg atgccaactt ggctaaaggc  
 240  
 gccaccgtcg gaatcttgct tcaggagccc ccgctcaccg aggacaaaac tgttcgagag  
 300  
 aacgtcgaag aggccgtcgg cgacatcaaa gccaaagctgg cacggttcga ggaagtctcc  
 360  
 gccgagatgg ccaaccctga cgccgacttt gacgcctga tggcggagat gggtagctg  
 420  
 cagaccgagc tcgataacgc caacgcg  
 447

<210> 1602  
 <211> 136  
 <212> PRT  
 <213> Homo sapiens

<400> 1602  
 Met Ala Glu Phe Ile Tyr Thr Met His Asn Val Arg Lys Ala Val Gly  
 1 5 10 15  
 Asp Lys Val Ile Leu Asp Asn Val Thr Leu Ser Phe Phe Pro Gly Ala  
 20 25 30  
 Lys Ile Gly Val Val Gly Pro Asn Gly Ala Gly Lys Ser Thr Met Leu  
 35 40 45  
 Lys Leu Met Ala Gly Leu Asp Lys Pro Asn Asn Gly Asp Ala Asn Leu  
 50 55 60  
 Ala Lys Gly Ala Thr Val Gly Ile Leu Leu Gln Glu Pro Pro Leu Thr  
 65 70 75 80  
 Glu Asp Lys Thr Val Arg Glu Asn Val Glu Glu Ala Val Gly Asp Ile  
 85 90 95  
 Lys Ala Lys Leu Ala Arg Phe Glu Glu Val Ser Ala Glu Met Ala Asn  
 100 105 110  
 Pro Asp Ala Asp Phe Asp Ala Leu Met Ala Glu Met Gly Glu Leu Gln  
 115 120 125  
 Thr Glu Leu Asp Asn Ala Asn Ala  
 130 135

<210> 1603  
 <211> 540  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1603

acgcgtaagc tcaccgaagc catgatggca atgctgctgg aactgcatta cagcaagcag  
60  
gaaatccttg aggcgtacct caacgaggtc ttcgtcggtc aggatggcca gcgcgccgtg  
120  
cacgggtttg gcttggccag tcagttcttc tttggccagc ctttgtccga gctgaagttg  
180  
catcaagtcg cgttgttggt cgggatggtc aagggcccggt cctattacaa cccgcggcgc  
240  
aatccggaac gtgcgctcga gcgtcgtaac ctggtgctgg atgtgctgga acagcagggg  
300  
gtagccactg ccgaacaagt cgctgccgca aagaaaatgc cgctgggtgt aaccactcgc  
360  
ggcaagctgg cggacagctc cttcccaggc tttatcgacc tgggtcaaacg ccagttgcgt  
420  
gaagattacc gcgacgaaga cttgaccgaa gaaggcctgc ggattttcac cagtttcgac  
480  
ccgattctgc agatgaaagc cgaagcatcg gtgaacgaca cattcaagcg cctgaccggc  
540

&lt;210&gt; 1604

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1604

Thr	Arg	Lys	Leu	Thr	Glu	Ala	Met	Met	Ala	Met	Leu	Leu	Glu	Leu	His
1				5					10					15	
Tyr	Ser	Lys	Gln	Glu	Ile	Leu	Glu	Ala	Tyr	Leu	Asn	Glu	Val	Phe	Val
			20					25					30		
Gly	Gln	Asp	Gly	Gln	Arg	Ala	Val	His	Gly	Phe	Gly	Leu	Ala	Ser	Gln
		35					40					45			
Phe	Phe	Phe	Gly	Gln	Pro	Leu	Ser	Glu	Leu	Lys	Leu	His	Gln	Val	Ala
	50					55					60				
Leu	Leu	Val	Gly	Met	Val	Lys	Gly	Pro	Ser	Tyr	Tyr	Asn	Pro	Arg	Arg
65					70					75				80	
Asn	Pro	Glu	Arg	Ala	Leu	Glu	Arg	Arg	Asn	Leu	Val	Leu	Asp	Val	Leu
			85						90					95	
Glu	Gln	Gln	Gly	Val	Ala	Thr	Ala	Glu	Gln	Val	Ala	Ala	Ala	Lys	Lys
			100					105					110		
Met	Pro	Leu	Gly	Val	Thr	Thr	Arg	Gly	Lys	Leu	Ala	Asp	Ser	Ser	Phe
		115					120					125			
Pro	Gly	Phe	Ile	Asp	Leu	Val	Lys	Arg	Gln	Leu	Arg	Glu	Asp	Tyr	Arg
	130					135					140				
Asp	Glu	Asp	Leu	Thr	Glu	Glu	Gly	Leu	Arg	Ile	Phe	Thr	Ser	Phe	Asp
145					150					155					160
Pro	Ile	Leu	Gln	Met	Lys	Ala	Glu	Ala	Ser	Val	Asn	Asp	Thr	Phe	Lys
			165						170					175	
Arg	Leu	Thr	Gly												
			180												

&lt;210&gt; 1605

&lt;211&gt; 427

<212> DNA

<213> Homo sapiens

<400> 1605

```

acgcgttggg gcggtcgggc gcacgcagtc cgtccaagag gtacaggcca gcgttgccgc
60
cattctttgc gggcgggata tgcactggga tattgcggcc catcgctgt gaccacacat
120
cgcagcgtg gaccaccag cccacctggt cccactcgca cgtgccagta ctgtccgcac
180
gcaagaaatc gcggtgagct gcgtgcgcct gctgggtgcc gcctgccact acggcaagac
240
ccagcgctac ggcgactgcc atgatgaccg aaaggacgcg acccctaata gatgcagtca
300
tctttctcct tcacaaagta tttggtaatt gtcacttagc tttatcgctc ggaatctgtg
360
aaccgttaac atcccgacgc ggaagctaac tagcaagcag tctaatacac tcccgggcca
420
aatgttg
427

```

<210> 1606

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1606

```

Met Thr Ala Ser Ile Arg Gly Arg Val Leu Ser Val Ile Met Ala Val
1           5           10           15
Ala Val Ala Leu Gly Leu Ala Val Val Ala Gly Gly Thr Gln Gln Ala
20           25           30
His Ala Ala His Arg Asp Phe Leu Arg Ala Asp Ser Thr Gly Thr Cys
35           40           45
Glu Trp Asp Gln Val Gly Trp Trp Val Gln Arg Cys Asp Val Trp Ser
50           55           60
Gln Ala Met Gly Arg Asn Ile Pro Val Gln Ile Pro Pro Ala Lys Asn
65           70           75           80
Gly Gly Asn Ala Gly Leu Tyr Leu Leu Asp Gly Leu Arg Ala Thr Asp
85           90           95
Arg Thr Asn Ala
100

```

<210> 1607

<211> 396

<212> DNA

<213> Homo sapiens

<400> 1607

```

gcacggctcc gctcgcggcc gccgtgatgg tacataccgg cgcgaccgtg atcgattctt
60
tgccgcaagg caatttactt ccacgtcacg gccgatgcga tgaagatgac gattcgtaaa
120
cggatgggac tgatcccgta cgaggcgatc gtgggcggga cgatgatgat cgtggcgacg
180

```



ttgctgtacg gattcatttt gtagcataaa taaggagggg ttcgatgaac aggaaaaccc ,  
 240  
 tttctgttgg cacccgattc gttcaaggaa agcatgacgg caaaagaagt ctgtatcgcg  
 300  
 atggaaaaag gactgagccg cgtctacccc gacgcccggg ttatccatgt gccgatggcg  
 360  
 gacggaggcg aaggcacggg gcagtcgctg gtcgac  
 396

<210> 1608

<211> 56

<212> PRT

<213> Homo sapiens

<400> 1608

Thr	Gly	Lys	Pro	Phe	Leu	Leu	Ala	Pro	Asp	Ser	Phe	Lys	Glu	Ser	Met
1				5				10					15		
Thr	Ala	Lys	Glu	Val	Cys	Ile	Ala	Met	Glu	Lys	Gly	Leu	Ser	Arg	Val
		20					25					30			
Tyr	Pro	Asp	Ala	Arg	Phe	Ile	His	Val	Pro	Met	Ala	Asp	Gly	Gly	Glu
		35				40					45				
Gly	Thr	Val	Gln	Ser	Leu	Val	Asp								
	50					55									

<210> 1609

<211> 505

<212> DNA

<213> Homo sapiens

<400> 1609

acgcgtagat gccacagcgc caggacacac gccaccgcgg agccgaggat gatccacatg  
 60  
 ggctcgactc acatggacgc catggattcg gcagtggaga gcaggccgcg agcttcgcac  
 120  
 gcggccccgac tgcgtagtcg cgtcatctca gtgcacatct gttcttcccc gctcatgagg  
 180  
 ttcgcggcgt aggacatcgt tacgtccagc atggtggcga tctcagcaat gtcacagccg  
 240  
 gccttgtgga gggcgaggag ccgagcgcgc gtgcttcctg ctggcacgat gcgttcacgt  
 300  
 gctgcgttga tgctgctgat actgatatgc aggatgcgcc cggggtcgaa gacggggaat  
 360  
 ggggtgaatt ggacggtccc ccctggccag cgagtcgttg gacgattcga ctggggacat  
 420  
 gcgcgagcag ggcgacgaca cgccacggaa cgcggcattc atggacgagg gaacggacat  
 480  
 ggagcgagaa aaagcgggcg tcgac  
 505

<210> 1610

<211> 129

<212> PRT

<213> Homo sapiens

&lt;400&gt; 1610

```

Met Pro Arg Ser Val Ala Cys Arg Arg Pro Ala Arg Ala Cys Pro Gln
 1          5          10          15
Ser Asn Arg Pro Thr Thr Arg Trp Pro Gly Gly Thr Val Gln Phe Thr
      20          25          30
Pro Phe Pro Val Phe Asp Pro Gly Arg Ile Leu His Ile Ser Ile Asp
      35          40          45
Asp Ile Asn Ala Ala Arg Glu Arg Ile Val Pro Ala Gly Ser Thr Arg
      50          55          60
Ala Arg Leu Leu Ala Leu His Lys Ala Gly Cys Asp Ile Ala Glu Ile
65          70          75          80
Ala Thr Met Leu Asp Val Thr Met Ser Tyr Ala Ala Asn Leu Met Ser
      85          90          95
Gly Glu Glu Gln Met Cys Thr Glu Met Thr Arg Leu Arg Ser Arg Ala
      100          105          110
Ala Cys Glu Ala Arg Gly Leu Leu Ser Thr Ala Glu Ser Met Ala Ser
      115          120          125
Met

```

&lt;210&gt; 1611

&lt;211&gt; 532

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1611

```

acgcgtgctg cgtttacagt tgcgtctatt gatttaggtg cgcattccaga atttttagga
60
aaaaatgata ttcaattagg caaaaaagaa tctgtagagg atactgcgaa agtatttaggt
120
agaatgttcg atggtattga attccgtggt ttttcacaac aagctggtga agatttagcg
180
aagttctctg gtgtaccggg gtggaatgga ttaacagacg attggcatcc tacacaaatg
240
ttagctgatt ttatgacaat aaaagagaat tttggatatc tagaaggaat aaacttaact
300
tacgttggag atggacgtaa taatattgcg cattcattaa tggtagcagg tgctatgtta
360
ggtgttaatg taagaatttg tacacctaaa tcattaaatc caaaagaggc atatgttgat
420
attgcaaaag aaaaagcgag tcaatatggt gggttcagtca tgattacgga taatattgca
480
gaagcagttg aaaatacaga tgctatatat acagatgttt gggtatcgac gg
532

```

&lt;210&gt; 1612

&lt;211&gt; 177

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1612

```

Thr Arg Ala Ala Phe Thr Val Ala Ser Ile Asp Leu Gly Ala His Pro
 1          5          10          15
Glu Phe Leu Gly Lys Asn Asp Ile Gln Leu Gly Lys Lys Glu Ser Val

```

```
<210> 1614
<211> 153
<212> PRT
<213> Homo sapiens
```

&lt;400&gt; 1614

```

Xaa Arg Val Gln Pro Arg Asn Met Leu Leu Phe Ala Cys His Leu Thr
 1           5           10           15
Asn Ala Thr Ala Gln Gly Val Gln Val Leu Arg Leu Leu Val Arg Cys
 20           25           30
Tyr Thr Leu Ala His Leu Pro Ala Val Ser Ile Gln Leu Ala Lys Cys
 35           40           45
Arg Gln Gly Pro Gly Leu Arg His Gly Arg His Thr Tyr Ile Gln Gly
 50           55           60
Ile His Tyr Ile Leu Gly Glu Arg Arg Ser Ser Arg Ser Cys Ser Ser
 65           70           75           80
Ser Ala Ala Ser Cys Glu Ala Phe Arg Glu Val Asp Met Asp Asn Val
 85           90           95
Arg Met Pro Gly Thr Val Lys Cys Arg Gly Leu Val Asp Ala Cys Glu
100           105           110
Arg Phe Arg Asp Leu Lys Arg Ser Lys Leu Met Cys Ser Arg Glu Leu
115           120           125
Asp Ala Ala Arg Cys Val Ala Cys Leu Val Val Asp Arg Arg Pro Asp
130           135           140
Pro Ile Glu Cys Gly Val Val Phe Ser
145           150

```

&lt;210&gt; 1615

&lt;211&gt; 363

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1615

```

gccggcttgc ccgacgcgtc tatgggtgat gttctgtcct ctgtcgtcgg gccgtggggc
 60
tcgggtgcttg tcagtgcctg tgatcatcatt tccctgcttg gggctctact ggcctggatc
120
ctactgtgcg gtgagacgat gcaggtgccg ggtgaggacg gcaccatgcc gaaactgttc
180
ggacggatca acaaacatga ggctccagct cccgctttgt ggatcaccaa catcgtctcc
240
cagatatgcc ttgtcatgac ggtgttgtgg gacgggtgctt acttggcgat ggcgacctg
300
gctgccgccc tcactctggt gcggtacctg ctgtcagccg cattcgccct gaagatggtg
360
atc
363

```

&lt;210&gt; 1616

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1616

```

Ala Gly Leu Pro Asp Ala Ser Met Gly Asp Val Leu Ser Ser Val Val
 1           5           10           15
Gly Pro Trp Gly Ser Val Leu Val Ser Ala Gly Val Ile Ile Ser Leu
 20           25           30
Leu Gly Ala Leu Leu Ala Trp Ile Leu Leu Cys Gly Glu Thr Met Gln

```

		35					40					45				
Val	Pro	Gly	Glu	Asp	Gly	Thr	Met	Pro	Lys	Leu	Phe	Gly	Arg	Ile	Asn	
	50						55				60					
Lys	His	Glu	Ala	Pro	Ala	Pro	Ala	Leu	Trp	Ile	Thr	Asn	Ile	Val	Ser	
65					70					75				80		
Gln	Ile	Cys	Leu	Val	Met	Thr	Val	Leu	Trp	Asp	Gly	Ala	Tyr	Leu	Ala	
				85				90						95		
Met	Ala	Thr	Leu	Ala	Ala	Ala	Leu	Ile	Leu	Val	Pro	Tyr	Leu	Leu	Ser	
			100					105					110			
Ala	Ala	Phe	Ala	Leu	Lys	Met	Val	Ile								
		115					120									

```
<210> 1617
<211> 447
<212> DNA
<213> Homo sapiens
```

```
<400> 1617
accggtgact  acctgtggga  gaagaagggc  atcgttccca  tctcaagat  tgataagggc
60
ctggctgacg  agggctgcc  cgttcgtctc  atgaagccga  tccccggcct  cgacgagttg
120
gtgcaccgcg  ccgtcgagga  gaagcacatc  ttcggtacca  aggagcgctc  tgtcatcctg
180
gatgacgaca  aagctggcat  cgaaaagatt  gtcgaccagc  agttcgaact  ggccgaacag
240
gtgcgcgctg  cgggtcttgt  gccgatcctc  gaacccgagg  tcgacatcca  cgctccacat
300
aaggagaagg  ctgaggaaa  gctgcacaac  ctcatccgcg  agcacatcga  ctctctgccg
360
ctcgacgcc  agatcatggt  gaagctgacg  atcccagatt  ccgaagacct  gtatgccgac
420
ctcattgcgg  atccgaagg  cctacgc
447
```

```
<210> 1618
<211> 149
<212> PRT
<213> Homo sapiens
```

<400> 1618															
Thr	Gly	Asp	Tyr	Leu	Trp	Glu	Lys	Lys	Gly	Ile	Val	Pro	Ile	Leu	Lys
1				5					10					15	
Ile	Asp	Lys	Gly	Leu	Ala	Asp	Glu	Gly	Cys	His	Val	Arg	Leu	Met	Lys
			20					25					30		
Pro	Ile	Pro	Gly	Leu	Asp	Glu	Leu	Val	His	Arg	Ala	Val	Glu	Glu	Lys
		35				40						45			
His	Ile	Phe	Gly	Thr	Lys	Glu	Arg	Ser	Val	Ile	Leu	Asp	Asp	Asp	Lys
	50					55					60				
Ala	Gly	Ile	Glu	Lys	Ile	Val	Asp	Gln	Gln	Phe	Glu	Leu	Ala	Glu	Gln
65					70					75					80
Val	Arg	Ala	Ala	Gly	Leu	Val	Pro	Ile	Leu	Glu	Pro	Glu	Val	Asp	Ile
				85					90					95	
His	Ala	Pro	His	Lys	Glu	Lys	Ala	Glu	Glu	Arg	Leu	His	Asn	Leu	Ile

```

                100                105                110
Arg Glu His Ile Asp Ser Leu Pro Leu Asp Ala Lys Ile Met Leu Lys
      115                120                125
Leu Thr Ile Pro Ser Ser Glu Asp Leu Tyr Ala Asp Leu Ile Ala Asp
      130                135                140
Pro Lys Val Leu Arg
145

```

<210> 1619  
 <211> 355  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1619
nnggtaccga aaccctgtgc gctaccgcat aaaatcaaag gaactagtat gcataacgta
60
acaacaaatg gtgcctccat tcccgcctt ggccttggca ctttccgtat gcccggcgaa
120
gatgtgcttc gcacgtccc ttacgcgctc aaggctggtt ttcgccatgt cgataccgcg
180
cagatttatg gcaatgaagt cgaggctcgg gaagcaattg cgacttccgg cgttcagcgt
240
ggcgacatct ttctgaccac aaaagtctgg gtagataatt ataagcatga tgctttcatc
300
gcattctgtcg atgaaagcct taccaagctt aagaccgact atgtcgatct gctgc
355

```

<210> 1620  
 <211> 118  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1620
Xaa Val Pro Lys Pro Val Ser Leu Pro His Lys Ile Lys Gly Thr Ser
1      5      10      15
Met His Asn Val Thr Thr Asn Gly Ala Ser Ile Pro Ala Leu Gly Leu
      20      25      30
Gly Thr Phe Arg Met Pro Gly Glu Asp Val Leu Arg Ile Val Pro Tyr
      35      40      45
Ala Leu Lys Ala Gly Phe Arg His Val Asp Thr Ala Gln Ile Tyr Gly
      50      55      60
Asn Glu Val Glu Val Gly Glu Ala Ile Ala Thr Ser Gly Val Gln Arg
65      70      75      80
Gly Asp Ile Phe Leu Thr Thr Lys Val Trp Val Asp Asn Tyr Lys His
      85      90      95
Asp Ala Phe Ile Ala Ser Val Asp Glu Ser Leu Thr Lys Leu Lys Thr
      100     105     110
Asp Tyr Val Asp Leu Leu
      115

```

<210> 1621  
 <211> 386  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1621

gcgcgccatg gaggcgcccc gggtcgcgcc aggatgctcc aggccaaagtg aagcgggtccg  
 60  
 gctgggggtcg gcgggacccg cgggccatgt acggcgacat attcaacgcc acggggcggg  
 120  
 cccccgaggc ggcggtaggc agcgcgctgg ccccaggagc cacgggtcaag gcagaaggcg  
 180  
 ctttgccgct ggagctggcc actgcgcgcg gtatgagggg cggcgcggcc acaaagcccc  
 240  
 acctgcccac ctacctgctg ctcttcttcc tgetgctgct ctggggggcg ctgggcggcc  
 300  
 tcttcatcgg ttgccagctg cgccattcgg ccttcgcgcg gctgcccac gaccgcttcg  
 360  
 ctgcgcacgc ccgcgcgccc ggaagg  
 386

&lt;210&gt; 1622

&lt;211&gt; 126

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1622

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Gln	Arg	His	Gly	Ala	Gly	Pro	Arg	Gly	Gly	Gly	Arg	Gln	Arg	Ala	Gly
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Pro	Arg	Ser	His	Gly	Gln	Gly	Arg	Arg	Arg	Phe	Ala	Ala	Gly	Ala	Gly
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His	Cys	Ala	Arg	Tyr	Glu	Gly	Arg	Arg	Gly	His	Lys	Ala	Arg	Pro	Ala
65				70					75					80	
His	Leu	Pro	Ala	Ala	Leu	Leu	Pro	Ala	Ala	Ala	Leu	Gly	Gly	Ala	Arg
			85					90					95		
Arg	Pro	Leu	His	Arg	Leu	Pro	Ala	Ala	Pro	Phe	Gly	Leu	Arg	Arg	Ala
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Ala	Pro	Arg	Pro	Leu	Arg	Ser	Arg	Arg	Pro	Arg	Ala	Arg	Lys		
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&lt;210&gt; 1623

&lt;211&gt; 314

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1623

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<210> 1624  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

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 Leu Lys Thr Pro Met Pro Cys Leu Gly Ala Lys His Lys Ala Gln Ser  
 35 40 45  
 Leu Gln Leu Ser Leu Ala Asp Ser Pro Leu Lys Leu Arg Lys Ser Ser  
 50 55 60  
 Gly Lys Gly Pro Gly Asn Pro Arg Pro Lys Ala Pro Arg Lys Thr Thr  
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 <213> Homo sapiens

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 180  
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 240  
 aaccgggcct tggaatggcc tgatctgagc cctagcacc ctgggaagcc gccaccttt  
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 360  
 tctttcagct tctccacca cccctgctc cagatgtaat ctgggaagac tggggagtca  
 420  
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<210> 1626  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 1626  
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 Pro Gln Thr Leu Gln Ser Pro Ala Pro Thr His Cys Ala Pro Asp Ser  
 35 40 45  
 Pro Val Phe Pro Asp Tyr Ile Trp Ser Arg Gly Trp Val Glu Lys Leu  
 50 55 60  
 Lys Glu Ser Arg Ser Val Phe Ser His Gly Leu Lys Ile Pro Ile Phe  
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 Phe Pro Glu Ala Arg Arg Lys Val Gly Gly Phe Pro Gly Val Leu Gly  
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 Leu Arg Ser Gly His Ser Lys Ala Arg Phe  
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<210> 1627  
 <211> 481  
 <212> DNA  
 <213> Homo sapiens

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<210> 1628  
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		20						25					30		
Val	Gln	Thr	Arg	Phe	Pro	Pro	Glu	Pro	Asn	Gly	Tyr	Leu	His	Ile	Gly
		35					40					45			
His	Ala	Lys	Ala	Ile	Val	Thr	Asp	Phe	Gly	Val	Ala	Glu	Asp	Phe	Gly
	50					55					60				
Gly	Thr	Cys	Asn	Leu	Arg	Leu	Asp	Asp	Thr	Asn	Pro	Gly	Thr	Glu	Glu
65				70						75				80	
Thr	Glu	Tyr	Val	Glu	Ser	Ile	Val	Ala	Asp	Ile	Glu	Trp	Leu	Gly	Tyr
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Ser	Pro	Ala	His	Val	Val	His	Ala								
		100													

&lt;210&gt; 1629

&lt;211&gt; 4519

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1629

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<210> 1630

<211> 496

<212> PRT

<213> Homo sapiens

<400> 1630

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		20						25					30		
Ala	Lys	Val	Leu	Arg	Pro	Leu	Arg	Ser	Cys	Asp	Glu	Pro	Leu	Thr	Pro
		35					40					45			
Pro	Pro	His	Ser	Pro	Thr	Ser	Met	Leu	Gln	Leu	Ile	His	Asp	Pro	Val
	50					55					60				
Ser	Pro	Arg	Gly	Met	Val	Thr	Arg	Ser	Ser	Pro	Gly	Ala	Gly	Pro	Ser
65					70					75					80
Asp	His	His	Ser	Ala	Ser	Arg	Asp	Glu	Arg	Phe	Lys	Arg	Arg	Gln	Leu
				85					90					95	
Leu	Arg	Leu	Gln	Ala	Thr	Glu	Arg	Thr	Met	Val	Arg	Glu	Lys	Glu	Asn
		100						105					110		
Asn	Pro	Ser	Gly	Lys	Lys	Glu	Leu	Ser	Glu	Val	Glu	Lys	Ala	Lys	Ile
		115					120					125			
Arg	Gly	Ser	Tyr	Leu	Thr	Val	Thr	Leu	Gln	Arg	Pro	Thr	Lys	Glu	Leu
	130					135					140				
His	Gly	Thr	Ser	Ile	Val	Pro	Lys	Leu	Gln	Ala	Ile	Thr	Ala	Ser	Ser
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Ala	Asn	Leu	Arg	His	Ser	Pro	Arg	Val	Leu	Val	Gln	His	Cys	Pro	Ala
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Arg	Thr	Pro	Gln	Arg	Gly	Asp	Glu	Glu	Gly	Leu	Gly	Gly	Glu	Glu	Glu
		180						185					190		
Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Asp	Asp	Ser	Ala	Glu	Glu	Gly	Gly
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Ala	Ala	Arg	Leu	Asn	Gly	Arg	Gly	Ser	Trp	Ala	Gln	Asp	Gly	Asp	Glu
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Ser	Trp	Met	Gln	Arg	Glu	Val	Trp	Met	Ser	Val	Phe	Arg	Tyr	Leu	Ser
225					230					235					240
Arg	Arg	Glu	Leu	Cys	Glu	Cys	Met	Arg	Val	Cys	Lys	Thr	Trp	Tyr	Lys
				245					250					255	
Trp	Cys	Cys	Asp	Lys	Arg	Leu	Trp	Thr	Lys	Ile	Asp	Leu	Ser	Arg	Cys
		260						265					270		
Lys	Ala	Ile	Val	Pro	Gln	Ala	Leu	Ser	Gly	Ile	Ile	Lys	Arg	Gln	Pro
		275					280					285			
Val	Ser	Leu	Asp	Leu	Ser	Trp	Thr	Asn	Ile	Ser	Lys	Lys	Gln	Leu	Thr

290		295		300											
Trp	Leu	Val	Asn	Arg	Leu	Pro	Gly	Leu	Lys	Asp	Leu	Leu	Leu	Ala	Gly
305			310					315							320
Cys	Ser	Trp	Ser	Ala	Val	Ser	Ala	Leu	Ser	Thr	Ser	Ser	Cys	Pro	Leu
			325					330							335
Leu	Arg	Thr	Leu	Asp	Leu	Arg	Trp	Ala	Val	Gly	Ile	Lys	Asp	Pro	Gln
		340						345					350		
Ile	Arg	Asp	Leu	Leu	Thr	Pro	Pro	Ala	Asp	Lys	Pro	Gly	Gln	Asp	Asn
		355					360					365			
Arg	Ser	Lys	Leu	Arg	Asn	Met	Thr	Asp	Phe	Arg	Leu	Ala	Gly	Leu	Asp
		370				375					380				
Ile	Thr	Asp	Ala	Thr	Leu	Arg	Leu	Ile	Ile	Arg	His	Met	Pro	Leu	Leu
385					390					395					400
Ser	Arg	Leu	Asp	Leu	Ser	His	Cys	Ser	His	Leu	Thr	Asp	Gln	Ser	Ser
			405						410				415		
Asn	Leu	Leu	Thr	Ala	Val	Gly	Ser	Ser	Thr	Arg	Tyr	Ser	Leu	Thr	Glu
		420						425					430		
Leu	Asn	Met	Ala	Gly	Cys	Asn	Lys	Leu	Thr	Asp	Gln	Thr	Leu	Ile	Tyr
		435					440				445				
Leu	Arg	Arg	Ile	Ala	Asn	Val	Thr	Leu	Ile	Asp	Leu	Arg	Gly	Cys	Lys
		450				455				460					
Gln	Ile	Thr	Arg	Lys	Ala	Cys	Glu	His	Phe	Ile	Ser	Asp	Leu	Ser	Ile
465					470					475					480
Asn	Ser	Leu	Tyr	Cys	Leu	Ser	Asp	Glu	Lys	Leu	Ile	Gln	Lys	Ile	Ser
			485						490					495	

&lt;210&gt; 1631

&lt;211&gt; 330

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1631

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120

ccatgttgac tctcgcgacg agcttggtga gttgcttggc ttttcgaaag acgacattac  
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caaccaagtt cagcaagctg tgggcgcctt ggggtttaccg ccactagaag atgaaaacgc  
240

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330

&lt;210&gt; 1632

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1632

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Lys	Thr	Leu	Gln	Thr	Leu	Phe	His	Val	Asp	Ser	Arg	Asp	Glu	Leu	Val

		20						25					30				
Glu	Leu	Leu	Gly	Phe	Ser	Lys	Asp	Asp	Ile	Thr	Asn	Gln	Val	Gln	Gln		
		35						40					45				
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		50					55				60						
Gly	Glu	Asp	Pro	Ala	Ser	Gln	Val	Pro	Pro	Val	Thr	Asp	Glu	Asp	Pro		
65					70					75					80		
Thr	Ala	Phe	Phe	Asp	Gln	Val	Pro	Asp	Val	Pro	Leu						
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&lt;210&gt; 1633

&lt;211&gt; 259

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1633

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259

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&lt;210&gt; 1634

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1634

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Leu	Leu	Glu	Leu	Leu	Val	His	Ala	Gly	Pro	Gly	Pro	Gly	Val	Arg	Arg		
			20					25					30				
Ala	Val	Arg	Leu	Cys	Ile	Gly	Thr	Gly	Leu	Leu	Gly	Gly	Phe	Thr	Thr		
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Trp	Leu	Trp	Gly	Ile	Ala	Tyr	Leu	Leu	Thr	Ser	Val	Val	Ala	Gly	Ala		
65				70				75						80			
Leu	Leu	Ala	Trp	Val	Met												
				85													

&lt;210&gt; 1635

&lt;211&gt; 792

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1635

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nngtcctttt ttatgaaccg gcggactcgg ttggcgttgt ggggcagggg gtggtggagc
60

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aagatggcgg ctcacatctgtc ctacggccga gtgaacctaa acgtgttgcg cgaggcgggtg  
120  
cgtcgcgagc tgcgcgagtt cctggacaag tgccgaggaa gcaaggcaat agtttgggat  
180  
gaatacctaa ctggaccctt tggcctgatt gcacagtatt cactattgaa ggaacatgaa  
240  
gtggaaaaaa tgttcacact taaaggaaat cgtttgccgg cagctgatgt gaagaatata  
300  
atTTTTTTTg tcagacccag gctagagttg atggatataa tcgctgaaaa cgtgctcagt  
360  
gaagatagac gaggcccaac gagagatttt catattctgt ttgtgccacg ccgtagcctg  
420  
ttgtgcgaac agcggttgaa ggatctgggt gtcttgggat cctttattca caggaggag  
480  
tacagcttag atctcattcc attcgatggg gatctcttat ccatggaatc agagggtgca  
540  
ttcaaagagt gctacctgga gggtgaccag acgagcctgt accacgcagc caaggggctg  
600  
atgaccctgc aagctctgta tggaacgac cccagatct ttgggaaagg agaatgcgct  
660  
cgggtgagaa ccggctgctt tgtggtggta aaggagggcc cttcacaccc caaaaggag  
720  
gaggaacggg aagctcctta caaacaatt cagttgatct taattattta tgaatactgt  
780  
actcatgaat tc  
792

&lt;210&gt; 1636

&lt;211&gt; 243

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1636

Met	Ala	Ala	His	Leu	Ser	Tyr	Gly	Arg	Val	Asn	Leu	Asn	Val	Leu	Arg
1				5					10					15	
Glu	Ala	Val	Arg	Arg	Glu	Leu	Arg	Glu	Phe	Leu	Asp	Lys	Cys	Ala	Gly
			20					25					30		
Ser	Lys	Ala	Ile	Val	Trp	Asp	Glu	Tyr	Leu	Thr	Gly	Pro	Phe	Gly	Leu
		35					40					45			
Ile	Ala	Gln	Tyr	Ser	Leu	Leu	Lys	Glu	His	Glu	Val	Glu	Lys	Met	Phe
	50					55					60				
Thr	Leu	Lys	Gly	Asn	Arg	Leu	Pro	Ala	Ala	Asp	Val	Lys	Asn	Ile	Ile
65					70					75				80	
Phe	Phe	Val	Arg	Pro	Arg	Leu	Glu	Leu	Met	Asp	Ile	Ile	Ala	Glu	Asn
			85						90					95	
Val	Leu	Ser	Glu	Asp	Arg	Arg	Gly	Pro	Thr	Arg	Asp	Phe	His	Ile	Leu
			100					105					110		
Phe	Val	Pro	Arg	Arg	Ser	Leu	Leu	Cys	Glu	Gln	Arg	Leu	Lys	Asp	Leu
		115					120					125			
Gly	Val	Leu	Gly	Ser	Phe	Ile	His	Arg	Glu	Glu	Tyr	Ser	Leu	Asp	Leu
	130					135					140				
Ile	Pro	Phe	Asp	Gly	Asp	Leu	Leu	Ser	Met	Glu	Ser	Glu	Gly	Ala	Phe
145					150					155				160	
Lys	Glu	Cys	Tyr	Leu	Glu	Gly	Asp	Gln	Thr	Ser	Leu	Tyr	His	Ala	Ala



1313

<210> 1639  
 <211> 396  
 <212> DNA  
 <213> Homo sapiens

<400> 1639  
 acgcgtgtac gtgcgcgtgt gatttcacat gccctcaaag atattcttac tgaaggcgat  
 60  
 aaagttatcg ttatgggaca taagcgacca gatttagatg ctataggtgc agctatcgga  
 120  
 gtttcgcgct ttgcatcaat gaataattta gaggcattta tcgtttcttaa tgattctgat  
 180  
 attgatccga cattacgtcg tgttatggat gagattgata agaaaccgga actaaaagaa  
 240  
 cgctttgtaa catcggtatga ggcttgggat atgatgactt ctaagacgac tgcgttggtt  
 300  
 gtagatacac ataaacctga aatggtctta gatgaaaatg tcttaaataa agcaaaccgc  
 360  
 aaagtagtca ttgatcatca tagacgtggc gaaact  
 396

<210> 1640  
 <211> 132  
 <212> PRT  
 <213> Homo sapiens

<400> 1640  
 Thr Arg Val Arg Ala Arg Val Ile Ser His Ala Leu Lys Asp Ile Leu  
 1 5 10 15  
 Thr Glu Gly Asp Lys Val Ile Val Met Gly His Lys Arg Pro Asp Leu  
 20 25 30  
 Asp Ala Ile Gly Ala Ala Ile Gly Val Ser Arg Phe Ala Ser Met Asn  
 35 40 45  
 Asn Leu Glu Ala Phe Ile Val Leu Asn Asp Ser Asp Ile Asp Pro Thr  
 50 55 60  
 Leu Arg Arg Val Met Asp Glu Ile Asp Lys Lys Pro Glu Leu Lys Glu  
 65 70 75 80  
 Arg Phe Val Thr Ser Asp Glu Ala Trp Asp Met Met Thr Ser Lys Thr  
 85 90 95  
 Thr Val Val Val Val Asp Thr His Lys Pro Glu Met Val Leu Asp Glu  
 100 105 110  
 Asn Val Leu Asn Lys Ala Asn Arg Lys Val Val Ile Asp His His Arg  
 115 120 125  
 Arg Gly Glu Thr  
 130

<210> 1641  
 <211> 376  
 <212> DNA  
 <213> Homo sapiens

<400> 1641  
 ttatcagcaa acgacagcag acaagagctc ctggggctct ggggaaatgc tgctgcctgc  
 60

tggccaaacg aactgatgga tgggctcttg gagtgggaga gactgggcag aagctgtgtg  
 120  
 ggggtgggtga ctcccaacct aaagaaccca ctgagacata tgtggcttcc ctcttccacc  
 180  
 ttcatcgcct ctttccgtct agatgctggc aaggggggac ttggtggaca aagagagcta  
 240  
 ctattcattc aggagctatg ttacaccagt cactttacat gtgccacttg ctctgggtta  
 300  
 aactgtgcct cccctcactc atatgttgaa gtcctaacc taactacctc agaatgggac  
 360  
 gttatttgga aaaaag  
 376

<210> 1642  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 1642  
 Met Asp Gly Leu Leu Glu Trp Glu Arg Leu Gly Arg Ser Cys Val Gly  
 1 5 10 15  
 Trp Val Thr Pro Asn Leu Lys Asn Pro Leu Arg His Met Trp Leu Pro  
 20 25 30  
 Ser Ser Thr Phe Ile Ala Ser Phe Arg Leu Asp Ala Gly Lys Gly Gly  
 35 40 45  
 Leu Gly Gly Gln Arg Glu Leu Leu Phe Ile Gln Glu Leu Cys Tyr Thr  
 50 55 60  
 Ser His Phe Thr Cys Ala Thr Cys Ser Gly Leu Asn Cys Ala Ser Pro  
 65 70 75 80  
 His Ser Tyr Val Glu Val Leu Thr Leu Thr Thr Ser Glu Trp Asp Val  
 85 90 95  
 Ile Trp Lys Lys  
 100

<210> 1643  
 <211> 494  
 <212> DNA  
 <213> Homo sapiens

<400> 1643  
 aagcttccag aattccatag gaaccagct gcccttcttg tacctcagtg aggtggagcc  
 60  
 gagtgtctga gagcaggtgc aggagaaggt gtgggctcca cctgggcctc tgaagccagg  
 120  
 ggccagaatc cccagatcta ggtccaagag ggggctccat gacctccca tgctgctcct  
 180  
 ctgcttggat ccaggatata agaaaggagg ggcacacact gtgggggaac tctggggtcc  
 240  
 cctgtgtgca tcagcgagtc ccgggtctgc cccaccagga tgcaaagggc ctggctgctc  
 300  
 cagccccatg ctcacagccc tataagtgca cgatggcacc ctatatcacc taagcggggc  
 360  
 tgtgcctcct gaggctttag ggacaccaga atgagcccc ctcggcggag tctggctctg  
 420

gggtgtgtgga gatgccacct gggacgggaa cccaggtgc atggagcccc actgcagaca  
480

ccatcccccg tgtg

494

<210> 1644

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1644

Met	Gly	Leu	Glu	Gln	Pro	Gly	Pro	Leu	His	Pro	Gly	Gly	Ala	Asp	Pro
1			5					10					15		
Gly	Leu	Ala	Asp	Ala	His	Arg	Gly	Pro	Gln	Ser	Ser	Pro	Thr	Val	Cys
		20					25					30			
Ala	Pro	Pro	Phe	Leu	Tyr	Pro	Gly	Ser	Lys	Gln	Arg	Ser	Ser	Met	Gly
	35						40				45				
Arg	Ser	Trp	Ser	Pro	Leu	Leu	Asp	Leu	Asp	Leu	Gly	Ile	Leu	Ala	Pro
	50				55					60					
Gly	Phe	Arg	Gly	Pro	Gly	Gly	Ala	His	Thr	Phe	Ser	Cys	Thr	Cys	Ser
65				70					75					80	
Gln	Thr	Leu	Gly	Ser	Thr	Ser	Leu	Arg	Tyr	Gln	Lys	Gly	Ser	Trp	Val
			85					90					95		
Pro	Met	Glu	Phe	Trp	Lys	Leu									
			100												

<210> 1645

<211> 330

<212> DNA

<213> Homo sapiens

<400> 1645

nnagatctgt cggataatgg ctttggtctcc gacatggtga cactggtgct tgccatcggg  
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aggagccggg ctctgaaaca cgtggccctt ggaaggaact tcaacgttcg gtgcaaggag  
120  
accctggacg atgtcctgca tcggatagcc cagctaatagc aggatgacga ctgtcctttg  
180  
cagtcactat cagtggctga gtcgcggttg aagcaggggtg ccagcatcct gatccgggct  
240  
ttgggcacca atcctaaact gacagcgctg gatatcagtg gcaatgccat aggggatgct  
300  
ggggccaaga tgctagccaa ggctctacgc  
330

<210> 1646

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1646

Xaa	Asp	Leu	Ser	Asp	Asn	Gly	Phe	Gly	Ser	Asp	Met	Val	Thr	Leu	Val
1			5					10				15			
Leu	Ala	Ile	Gly	Arg	Ser	Arg	Ser	Leu	Lys	His	Val	Ala	Leu	Gly	Arg

		20						25					30				
Asn	Phe	Asn	Val	Arg	Cys	Lys	Glu	Thr	Leu	Asp	Asp	Val	Leu	His	Arg		
		35					40					45					
Ile	Ala	Gln	Leu	Met	Gln	Asp	Asp	Asp	Cys	Pro	Leu	Gln	Ser	Leu	Ser		
		50				55					60						
Val	Ala	Glu	Ser	Arg	Leu	Lys	Gln	Gly	Ala	Ser	Ile	Leu	Ile	Arg	Ala		
65					70				75					80			
Leu	Gly	Thr	Asn	Pro	Lys	Leu	Thr	Ala	Leu	Asp	Ile	Ser	Gly	Asn	Ala		
			85					90					95				
Ile	Gly	Asp	Ala	Gly	Ala	Lys	Met	Leu	Ala	Lys	Ala	Leu	Arg				
		100						105					110				

&lt;210&gt; 1647

&lt;211&gt; 501

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1647

```

aggccgctcg gtgatccgcg gcggcggcag cggcgcttcc tgctaggacc ggccggggcc
60
gtaccggagg ctcgggctcc accgaccctc ctcccacccc ctcccactca ccctctgggc
120
cgcgactgcg cagggcgggg ccggccgaac catgggcccgc ggtgtgggct aagctggtgg
180
ccccggcttt agactggacc ccacaatgtt tgcagagatg ttcaggcacg cgggagctga
240
ttacacacaa tgaatggggg caatgagagc agtggagcag acagagctgg gggccctgtg
300
gccacatctg tccccatcgg ctggcagcgc tgtgtgcgag aggggtgctgt gctctacatc
360
agtccaagtg gcacagagct gtcttccttg gagcaaaccg ggagctacct cctcagcgat
420
gggacctgca agtgcggtct ggagtgtcca cttaatgtcc ccaaggtttt caactttgac
480
cctttggccc cggtgacccc g
501

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&lt;210&gt; 1648

&lt;211&gt; 84

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1648

Met	Asn	Gly	Gly	Asn	Glu	Ser	Ser	Gly	Ala	Asp	Arg	Ala	Gly	Gly	Pro		
1				5				10					15				
Val	Ala	Thr	Ser	Val	Pro	Ile	Gly	Trp	Gln	Arg	Cys	Val	Arg	Glu	Gly		
			20				25					30					
Ala	Val	Leu	Tyr	Ile	Ser	Pro	Ser	Gly	Thr	Glu	Leu	Ser	Ser	Leu	Glu		
		35				40					45						
Gln	Thr	Arg	Ser	Tyr	Leu	Leu	Ser	Asp	Gly	Thr	Cys	Lys	Cys	Gly	Leu		
	50				55				60								
Glu	Cys	Pro	Leu	Asn	Val	Pro	Lys	Val	Phe	Asn	Phe	Asp	Pro	Leu	Ala		
65				70				75						80			
Pro	Val	Thr	Pro														

<210> 1649  
 <211> 441  
 <212> DNA  
 <213> Homo sapiens

<400> 1649  
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 accaactcac ggttgtcgcg catctttctcc aacaagggtga tccggcgcta tccggccttt  
 120  
 gaagacttcc acgggatgga agaatgcata gatcagatcg tttcgtatatt ccgccacgcc  
 180  
 gcccaaggcc tggaagagaa gaaacagatc ctttacctgc tcggccccgt cggcggcggt  
 240  
 aaatcgctccc tggccgaaaa gctgaaacag ctgatcgaga aggtccccctt ctacgccatc  
 300  
 aagggtctgc cggctcttcga gtcgccccctg gggttgttca acgccactga agacggcgcg  
 360  
 atcctcgagg aagacttcgg gattccacgg cgttacctga acaccatcat gtcgccttgg  
 420  
 gcgaccaagc gcctggccga a  
 441

<210> 1650  
 <211> 147  
 <212> PRT  
 <213> Homo sapiens

<400> 1650  
 Ala Ser Ala Ala Glu Arg Val Leu Leu Ala Ile Gly Glu Pro Glu Leu  
 1 5 10 15  
 Leu Asp Thr Ser Thr Asn Ser Arg Leu Ser Arg Ile Phe Ser Asn Lys  
 20 25 30  
 Val Ile Arg Arg Tyr Pro Ala Phe Glu Asp Phe His Gly Met Glu Glu  
 35 40 45  
 Cys Ile Asp Gln Ile Val Ser Tyr Phe Arg His Ala Ala Gln Gly Leu  
 50 55 60  
 Glu Glu Lys Lys Gln Ile Leu Tyr Leu Leu Gly Pro Val Gly Gly Gly  
 65 70 75 80  
 Lys Ser Ser Leu Ala Glu Lys Leu Lys Gln Leu Ile Glu Lys Val Pro  
 85 90 95  
 Phe Tyr Ala Ile Lys Gly Ser Pro Val Phe Glu Ser Pro Leu Gly Leu  
 100 105 110  
 Phe Asn Ala Thr Glu Asp Gly Ala Ile Leu Glu Glu Asp Phe Gly Ile  
 115 120 125  
 Pro Arg Arg Tyr Leu Asn Thr Ile Met Ser Pro Trp Ala Thr Lys Arg  
 130 135 140  
 Leu Ala Glu  
 145

<210> 1651  
 <211> 408

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1651

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nccgcggatc cctccggcat cctgggtatc gctccctcga aggaatccgg agcccgactg
60
cgccgcgagc tttccgaacg cctcgaggat tacgccgcac aaacttccat ggtgcgttcc
120
gtacactccc tcgcattcgc gttgctgcgc acagcggccg aggaggagct gcgccttatt
180
accggtgcgg acnaagacgc cgttatccgc gagctgctca cgggccaagc agaagacgga
240
catggctcgt ggcccgcgga gatgcgcccc gcgtggaatn natgtgggct ttcgcggcag
300
ctgcgcgatt tccttttgcg ttccattgaa cgcggcctgg gaccgggtga cctagagagc
360
ctcggtgccg agcacggccg ccccatgtgg tctgcggcgg gtgaattc
408

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&lt;210&gt; 1652

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1652

```

Xaa Ala Asp Pro Ser Gly Ile Leu Val Ile Ala Pro Ser Lys Glu Ser
 1           5           10           15
Gly Ala Arg Leu Arg Arg Glu Leu Ser Glu Arg Leu Glu Asp Tyr Ala
          20           25           30
Ala Gln Thr Ser Met Val Arg Ser Val His Ser Leu Ala Phe Ala Leu
          35           40           45
Leu Arg Thr Ala Ala Glu Glu Leu Arg Leu Ile Thr Gly Ala Asp
          50           55           60
Xaa Asp Ala Val Ile Arg Glu Leu Leu Thr Gly Gln Ala Glu Asp Gly
65           70           75           80
His Gly Ser Trp Pro Ala Glu Met Arg Pro Ala Trp Asn Xaa Cys Gly
          85           90           95
Leu Ser Arg Gln Leu Arg Asp Phe Leu Leu Arg Ser Ile Glu Arg Gly
          100          105          110
Leu Gly Pro Gly Asp Leu Glu Ser Leu Gly Ala Glu His Gly Arg Pro
          115          120          125
Met Trp Ser Ala Ala Gly Glu Phe
          130          135

```

&lt;210&gt; 1653

&lt;211&gt; 398

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1653

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ccagcctctc tccgaccgcg tccttcttcc ggccatacgg cacccaatgt cgcgtcacca
60
tcacccgcgc acatggccat cgctccaccg gacgagttga gtgacaagat ccggtgcatt
120

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ctgcgcaccc ttgaacctgg tgacagtgtg aaggagattc tcaacacgtc gcgtgtcgtc  
 180  
 ggcattgacg tccagagcag cctgcttatt gctgggtgctc agcatctgta cttgttggac  
 240  
 gattacttcc agcgtccgaa cgggtgaaatc gtcaatgtct gggaagctcc gccacacgag  
 300  
 cgcgatgcct tgatcgtggc ggccggtgtc gcacaggtgg cacaagcag cacaccctg  
 360  
 cagatatggc gctgggaaca gctccgactt tgtctaga  
 398

<210> 1654  
 <211> 132  
 <212> PRT  
 <213> Homo sapiens

<400> 1654  
 Pro Ala Ser Leu Arg Pro Arg Pro Ser Ser Gly His Thr Ala Pro Asn  
 1 5 10 15  
 Val Ala Ser Pro Ser Pro Ala His Met Ala Ile Ala Pro Pro Asp Glu  
 20 25 30  
 Leu Ser Asp Lys Ile Arg Cys Ile Leu Arg Thr Leu Glu Pro Gly Asp  
 35 40 45  
 Ser Val Lys Glu Ile Leu Asn Thr Ser Arg Val Val Gly Ile Asp Val  
 50 55 60  
 Gln Ser Ser Leu Leu Ile Ala Gly Ala Gln His Leu Tyr Leu Leu Asp  
 65 70 75 80  
 Asp Tyr Phe Gln Arg Pro Asn Gly Glu Ile Val Asn Val Trp Glu Ala  
 85 90 95  
 Pro Pro His Glu Arg Asp Ala Leu Ile Val Ala Ala Gly Val Ala Gln  
 100 105 110  
 Val Ala Gln Ser Ser Thr Pro Val Gln Ile Trp Arg Trp Glu Gln Leu  
 115 120 125  
 Arg Leu Cys Leu  
 130

<210> 1655  
 <211> 1115  
 <212> DNA  
 <213> Homo sapiens

<400> 1655  
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 ctggagggcg agcgtggcaa gaggcccccg ccggagggcg agcctgcagc cccggcgtcc  
 120  
 ggagttctgg ataagctttt cggaaagcgg ctctctgcagg ctggtcgcta cctggtgtcc  
 180  
 cacaaggcgt ggatgaagac ggtgcctaca gagaactgcg acgtgctgat gaccttccca  
 240  
 gacacgaccg atgaccacac gctgctatgg ctgctgaacc acatccgcgt gggcattccc  
 300  
 gagctcatcg tgcaagtccg ccaccaccgc cacacgcgtg cctacgcctt ctttgtcacc  
 360



gccacgtatg agagcctact ccgagggggcc gacgagctgg gtctgcgcaa agcagtgaag  
 420  
 gccgagtttg gcggggggcac ccgcggcttc tcctgcgagg aggactttat ctatgagaat  
 480  
 gtggagagcg agctacgctt cttcacctcc caggaacgcc agagcatcat ccgcttctgg  
 540  
 ctgcagaatt tgcgtgccaa gcagggagaa gcactccaca acgtgcgctt cctggaggac  
 600  
 cagccaatca tcccggagct ggcagcacgt gggatcatcc agcagggtgt cctgtccac  
 660  
 gagcagcgta ttctgaaccg cctcatgaag tcatgggtgc aggccgtgtg tgaaaaccag  
 720  
 cctctagatg acatctgtga ttacttttgt gtgaaaattg ccatgtactt cgcttggtg  
 780  
 ggcttctaca cgtcggctat ggtataccca gctgtcttcg ggtctgtcct gtacacattc  
 840  
 acagaggctg atcagacaag ccgggatgtt tcctgcgagg tctttgccct cttcaacgtg  
 900  
 atctggtcga cgctgttcct ataggaatgg aagcgtatag gggctgagct gggatataat  
 960  
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 1020  
 gtgcgacgta tcatcccat cactcggggc gaggagttct actaccgcc ctggaagcgg  
 1080  
 ctgctcttcc agctgcttgt tagcctccgc ctgtg  
 1115

<210> 1656

<211> 299

<212> PRT

<213> Homo sapiens

<400> 1656

Met	Ala	Glu	Ala	Ala	Ser	Gly	Ala	Gly	Gly	Thr	Ser	Leu	Glu	Gly	Glu
1				5					10					15	
Arg	Gly	Lys	Arg	Pro	Pro	Pro	Glu	Gly	Glu	Pro	Ala	Ala	Pro	Ala	Ser
			20					25					30		
Gly	Val	Leu	Asp	Lys	Leu	Phe	Gly	Lys	Arg	Leu	Leu	Gln	Ala	Gly	Arg
		35					40					45			
Tyr	Leu	Val	Ser	His	Lys	Ala	Trp	Met	Lys	Thr	Val	Pro	Thr	Glu	Asn
	50					55					60				
Cys	Asp	Val	Leu	Met	Thr	Phe	Pro	Asp	Thr	Thr	Asp	Asp	His	Thr	Leu
65					70					75					80
Leu	Trp	Leu	Leu	Asn	His	Ile	Arg	Val	Gly	Ile	Pro	Glu	Leu	Ile	Val
				85					90					95	
Gln	Val	Arg	His	His	Arg	His	Thr	Arg	Ala	Tyr	Ala	Phe	Phe	Val	Thr
			100					105					110		
Ala	Thr	Tyr	Glu	Ser	Leu	Leu	Arg	Gly	Ala	Asp	Glu	Leu	Gly	Leu	Arg
		115					120					125			
Lys	Ala	Val	Lys	Ala	Glu	Phe	Gly	Gly	Gly	Thr	Arg	Gly	Phe	Ser	Cys
	130					135					140				
Glu	Glu	Asp	Phe	Ile	Tyr	Glu	Asn	Val	Glu	Ser	Glu	Leu	Arg	Phe	Phe
145				150						155					160
Thr	Ser	Gln	Glu	Arg	Gln	Ser	Ile	Ile	Arg	Phe	Trp	Leu	Gln	Asn	Leu

				165					170					175		
Arg	Ala	Lys	Gln	Gly	Glu	Ala	Leu	His	Asn	Val	Arg	Phe	Leu	Glu	Asp	
			180					185					190			
Gln	Pro	Ile	Ile	Pro	Glu	Leu	Ala	Ala	Arg	Gly	Ile	Ile	Gln	Gln	Val	
		195					200					205				
Phe	Pro	Val	His	Glu	Gln	Arg	Ile	Leu	Asn	Arg	Leu	Met	Lys	Ser	Trp	
	210					215					220					
Val	Gln	Ala	Val	Cys	Glu	Asn	Gln	Pro	Leu	Asp	Asp	Ile	Cys	Asp	Tyr	
225				230						235					240	
Phe	Gly	Val	Lys	Ile	Ala	Met	Tyr	Phe	Ala	Trp	Leu	Gly	Phe	Tyr	Thr	
			245					250					255			
Ser	Ala	Met	Val	Tyr	Pro	Ala	Val	Phe	Gly	Ser	Val	Leu	Tyr	Thr	Phe	
			260					265				270				
Thr	Glu	Ala	Asp	Gln	Thr	Ser	Arg	Asp	Val	Ser	Cys	Val	Val	Phe	Ala	
		275					280					285				
Leu	Phe	Asn	Val	Ile	Trp	Ser	Thr	Leu	Phe	Leu						
	290					295										

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<210> 1657
<211> 333
<212> DNA
<213> Homo sapiens
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<400> 1657
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60
gcacggagac gcggcgctcag cacggacagc acgcagtctg tgagcctctg caggcagttc
120
ttggagcccg cgggcttccc gcgccgcttc agggggcggg cggcagctcg ggccgggtact
180
tctcccaaaa ctgctccggg caggggcgct ccagcagcct ctgcatgaga cggacggcat
240
ccacgcggcc cgtgtaagtg gccactcct gcggcgacat tccacggcgg gggtagcctc
300
gcgtggacat ccgcccttgc tagcatcagg gct
333
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<210> 1658
<211> 108
<212> PRT
<213> Homo sapiens
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<400> 1658																
Met	Leu	Ala	Gly	Ala	Asp	Val	His	Ala	Arg	Val	Pro	Pro	Pro	Trp	Asn	
1				5					10					15		
Val	Ala	Ala	Gly	Val	Gly	His	Leu	His	Gly	Pro	Arg	Gly	Cys	Arg	Pro	
			20					25					30			
Ser	His	Ala	Glu	Ala	Ala	Gly	Ala	Pro	Leu	Pro	Gly	Ala	Val	Leu	Gly	
		35					40					45				
Glu	Val	Pro	Ala	Arg	Ala	Ala	Ala	Arg	Pro	Leu	Lys	Arg	Arg	Gly	Lys	
	50					55					60					
Pro	Ala	Gly	Ser	Lys	Asn	Cys	Leu	Gln	Arg	Leu	Thr	Asp	Cys	Val	Leu	
65					70					75					80	
Ser	Val	Leu	Thr	Pro	Arg	Leu	Arg	Ala	Gly	Pro	Gly	Gly	Arg	Gly	Arg	

85 90 95  
 Pro Gly Pro His Gly Pro Asp Asp Leu Glu Pro Leu  
 100 105

<210> 1659  
 <211> 382  
 <212> DNA  
 <213> Homo sapiens

<400> 1659  
 nnaagcttat ttgttattac taatattttc cgtgaccaga tgggccgcta tgggtgagatt  
 60  
 tacacaactt acaagatgat tttggatgct attcgtaagg tgcctactgc cactgtttctc  
 120  
 cttaatggag acagtccact tttctacaag ccagctattc caaatcctgt acagtatttt  
 180  
 ggttttgact tggagaaagg cccagcccaa ctggctcact ataataccga aggaattctc  
 240  
 tgtcccgact gccaaaggcat cctcaaatat gagcataata cctatgcaaa cttgggcgcc  
 300  
 tatatctgtg aagactgtgg atgtaaacgt cctgatctcg actatcgctt gacagaactg  
 360  
 gttgagttaa ccaacaatcg cn  
 382

<210> 1660  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 1660  
 Xaa Ser Leu Phe Val Ile Thr Asn Ile Phe Arg Asp Gln Met Gly Arg  
 1 5 10 15  
 Tyr Gly Glu Ile Tyr Thr Thr Tyr Lys Met Ile Leu Asp Ala Ile Arg  
 20 25 30  
 Lys Val Pro Thr Ala Thr Val Leu Leu Asn Gly Asp Ser Pro Leu Phe  
 35 40 45  
 Tyr Lys Pro Ala Ile Pro Asn Pro Val Gln Tyr Phe Gly Phe Asp Leu  
 50 55 60  
 Glu Lys Gly Pro Ala Gln Leu Ala His Tyr Asn Thr Glu Gly Ile Leu  
 65 70 75 80  
 Cys Pro Asp Cys Gln Gly Ile Leu Lys Tyr Glu His Asn Thr Tyr Ala  
 85 90 95  
 Asn Leu Gly Ala Tyr Ile Cys Glu Asp Cys Gly Cys Lys Arg Pro Asp  
 100 105 110  
 Leu Asp Tyr Arg Leu Thr Glu Leu Val Glu Leu Thr Asn Asn Arg  
 115 120 125

<210> 1661  
 <211> 524  
 <212> DNA  
 <213> Homo sapiens

<400> 1661

acgcgtcgat gatcatggag aagacgcggg ccggctcctt gcctgtgacc ttcttgtaca  
 60  
 gctgcgggta gtagagctcc aggcctctcga ggaaggccac gtagcccttg tggccgggtcc  
 120  
 gctgcaggat gtccaggagc acacccactt tccgtttgcg gatgaccagg ttgggggtcgc  
 180  
 tgagcacctg ctctcatca tcagggttca ggaccttgca ctgccgcagg taagggtgtga  
 240  
 tgcgtgaggg gtcgatgacc gaggtgagcg tcacccggaa gccctccagg acgttccagc  
 300  
 actcgtcatc gttctcgtag tccgacatgg cctcagcagg caggctgggg agtgtggggc  
 360  
 agtgctgaga gcgatgccgg ctcttgcctc caccggggcc cagctccacac tccttctcag  
 420  
 acgctggggc agggctctcg tcagggcacg gagggggatc agcccaggcg catccaggag  
 480  
 aggtgcccag ctccgtgtcc catcccacgc ttgatcgtcg catg  
 524

<210> 1662  
 <211> 174  
 <212> PRT  
 <213> Homo sapiens

<400> 1662  
 Met Gln Arg Ser Ser Val Gly Trp Asp Thr Glu Leu Gly Thr Ser Pro  
 1 5 10 15  
 Gly Cys Ala Trp Ala Asp Pro Pro Arg Cys Pro Asp Glu Ser Pro Gly  
 20 25 30  
 Pro Ala Ser Glu Lys Glu Trp Glu Leu Gly Pro Gly Gly Gly Arg Ser  
 35 40 45  
 Arg His Arg Ser Gln His Cys Pro Thr Leu Pro Ser Leu Pro Ala Glu  
 50 55 60  
 Ala Met Ser Asp Tyr Glu Asn Asp Asp Glu Cys Trp Asn Val Leu Glu  
 65 70 75 80  
 Gly Phe Arg Val Thr Leu Thr Ser Val Ile Asp Pro Ser Arg Ile Thr  
 85 90 95  
 Pro Tyr Leu Arg Gln Cys Lys Val Leu Asn Pro Asp Asp Glu Glu Gln  
 100 105 110  
 Val Leu Ser Asp Pro Asn Leu Val Ile Arg Lys Arg Lys Val Gly Val  
 115 120 125  
 Leu Leu Asp Ile Leu Gln Arg Thr Gly His Lys Gly Tyr Val Ala Phe  
 130 135 140  
 Leu Glu Ser Leu Glu Leu Tyr Tyr Pro Gln Leu Tyr Lys Lys Val Thr  
 145 150 155 160  
 Gly Lys Glu Pro Ala Arg Val Phe Ser Met Ile Ile Asp Ala  
 165 170

<210> 1663  
 <211> 321  
 <212> DNA  
 <213> Homo sapiens

<400> 1663

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 tcccgaaccc aagacgacga ggctcggaca cgcgcttcta tctcgaccct tcaagacgag  
 120  
 gtcaagaggt ggcacgatcc cgactacgtc cgtgctcagg cgcgctccca gctcggctgg  
 180  
 gtgatgccgg gcgaaactgg gtatcaggtc attggagaaa acggtaaggt cattggatcg  
 240  
 acgacttctt tggacgaaaa agatccggcg agtgaagcca gcgctgacgc tcggtggtgg  
 300  
 caagaggctt gcggatcagt c  
 321

<210> 1664

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1664

Xaa	Val	Leu	Val	Met	Ile	Thr	Pro	Ser	Leu	Gly	Ile	Tyr	Phe	Ser	Gln
1				5					10					15	
Arg	Ser	Gln	Ile	Ser	Arg	Thr	Gln	Asp	Asp	Glu	Ala	Arg	Thr	Arg	Ala
		20						25					30		
Ser	Ile	Ser	Thr	Leu	Gln	Asp	Glu	Val	Lys	Arg	Trp	His	Asp	Pro	Asp
		35				40						45			
Tyr	Val	Arg	Ala	Gln	Ala	Arg	Ser	Gln	Leu	Gly	Trp	Val	Met	Pro	Gly
	50					55					60				
Glu	Thr	Gly	Tyr	Gln	Val	Ile	Gly	Glu	Asn	Gly	Lys	Val	Ile	Gly	Ser
65				70					75					80	
Thr	Thr	Ser	Leu	Asp	Glu	Lys	Asp	Pro	Ala	Ser	Glu	Ala	Ser	Ala	Asp
			85					90						95	
Ala	Arg	Trp	Trp	Gln	Glu	Ala	Cys	Gly	Ser	Val					
			100					105							

<210> 1665

<211> 431

<212> DNA

<213> Homo sapiens

<400> 1665

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 60  
 ggcccgaacta tctccggtgg tgaagtactc atgcaacgcg cttttgcgtg gaacttgctc  
 120  
 atgagtgcta agtcgatggg cattcatacc tgtatcgata cctccggttt tttgggggct  
 180  
 gcggcaacag atgacttttt agagtctgtt gatttggtgt tgctcgacgt caaatcggga  
 240  
 gatgaagaaa tctaccgtgc cctcaccggc agagcgttgc aacctaccat cgattttggt  
 300  
 gatcgtctca ccgcgctcgg taaagaaatc tggattcggg tcgttggtgt ccccggtatc  
 360  
 accgactcgg tagagaacgt ggaaaagggt gccgatatcg tccgcagatg gcgcaccgct  
 420

gtttcacgcg t  
431

<210> 1666  
<211> 143  
<212> PRT  
<213> Homo sapiens

<400> 1666  
Ala Ser Glu Leu Ile Lys Lys Leu Lys Arg Tyr Lys Met Val Leu Arg  
1 5 10 15  
Ser Thr Gly Gly Gly Pro Thr Ile Ser Gly Gly Glu Val Leu Met Gln  
20 25 30  
Arg Ala Phe Ala Trp Asn Leu Leu Met Ser Ala Lys Ser Met Gly Ile  
35 40 45  
His Thr Cys Ile Asp Thr Ser Gly Phe Leu Gly Ala Ala Ala Thr Asp  
50 55 60  
Asp Phe Leu Glu Ser Val Asp Leu Val Leu Leu Asp Val Lys Ser Gly  
65 70 75 80  
Asp Glu Glu Ile Tyr Arg Ala Leu Thr Gly Arg Ala Leu Gln Pro Thr  
85 90 95  
Ile Asp Phe Gly Asp Arg Leu Thr Ala Leu Gly Lys Glu Ile Trp Ile  
100 105 110  
Arg Phe Val Val Val Pro Gly Tyr Thr Asp Ser Val Glu Asn Val Glu  
115 120 125  
Lys Val Ala Asp Ile Val Arg Arg Trp Arg Thr Ala Val Ser Arg  
130 135 140

<210> 1667  
<211> 370  
<212> DNA  
<213> Homo sapiens

<400> 1667  
tccgctgaga ccagcggttg tgacttccca ggtgagactg tccgcacat ggccaagatc  
60  
gttgagtcta ctgaggcccg tggcttgac aagatcgcca agatcgactg ggatccgcac  
120  
accaccagtg gcatcatgtc gaaggcagct gctgagatcg ctgagcgcgc cgaggccaag  
180  
ttcatcgtag cctttaccaa gtccggtgac accgcccgtc gtatcgctcg tctgcgtccg  
240  
agcaccgccg tcatcgtttt cacctctgat gagaccacga ccaagaccct cgcttgggtc  
300  
tggggcgctc acgcccgtcg taccgccgtg ttaagaatg cggaggagct gtaccgctgg  
360  
gttaacgcgt  
370

<210> 1668  
<211> 123  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 1668

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Ser Ala Glu Thr Ser Val Gly Asp Phe Pro Gly Glu Thr Val Arg Thr
 1           5           10           15
Met Ala Lys Ile Val Glu Ser Thr Glu Ala Arg Gly Leu Asp Lys Ile
          20           25           30
Ala Lys Ile Asp Trp Asp Pro His Thr Thr Ser Gly Ile Met Ser Lys
          35           40           45
Ala Ala Ala Glu Ile Ala Glu Arg Ala Glu Ala Lys Phe Ile Val Ala
          50           55           60
Phe Thr Lys Ser Gly Asp Thr Ala Arg Arg Ile Ala Arg Leu Arg Pro
65           70           75           80
Ser Thr Pro Leu Ile Val Phe Thr Ser Asp Glu Thr Thr Thr Lys Thr
          85           90           95
Leu Ala Trp Val Trp Gly Ala His Ala Val Val Thr Pro Val Phe Lys
          100          105          110
Asn Ala Glu Glu Leu Tyr Arg Trp Val Asn Ala
          115          120

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&lt;210&gt; 1669

&lt;211&gt; 1491

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1669

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ggatcctgca gtggtgatct gtcacgtca cgtcacagaa ctgaacatgg aaatgaacaa
60
cgaaaaactcc acccccttct caaacgagtt attcctagct ccgccccag tccttgctc
120
tcccagcctt ggtggtaatt agcttgaaaag tgggaacgag agtgcggtcc gcaaagaaaag
180
gacttctggt tagacactga aatacaaaaca gactgccaac gagctctggg caaagctgcc
240
ccgtcttctt ttttcgaaaag accctcaaaa actgcctttc cttctgctac caaaacttgg
300
gccctagaaa gtggctgcgg agtggagcag atggacatca ctgagaatgg tagaggaggg
360
gctgtgtttt ctgaggggga gtcattggcag cttgtgctgg gggccaggaa gggaaaaaac
420
caatctggca ttcaggttgt ggaaggcaaa gtgaaacaag aagtcatttg ggaaaatatt
480
atattataaa cacatagaat aatatgtaca cgctcatata catcccaaag agaagcctca
540
aggagtccg tttcttctca aaagaaactt cactatgata aagcattcct atagtgggaa
600
ttaactacaa tgaaataatt taacaatttc atttatgcta tatctgtgtc cactacagag
660
tctacggtga aggctgtgtg gagcgagtgt gtctagtgga ctggaacacc aacgcgttct
720
tcaaaaatag gcaatgacct gtttttttct attcacattt acaatagcta cacagtgatg
780
aaacgcagac tgaaaaatca aatggcagga cgatggaact gtcgtcaagg ttctcagact
840
tgtggcttct gcacctgtta tacttttgga tacgagttag ctccacttag cttcgttaag
900

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attagaaatt tccatgaaac acttaccac atataaattc tgtgttaaagc tttatttttt  
 960  
 tccccaccta ctttaatttt ttttaaaaag tgaaataaga ggaaaaactc ttataaaata  
 1020  
 taagggtttta catacgagag agcgaggaac accccggagg ctgccggtgc gtgtggcttc  
 1080  
 atgtttctgt gctacatgag tctagtgtcc tcatcttcca ttgtgacaac ctttctcccc  
 1140  
 ccatcacact gtcaatgagc tctaggcaaa gctgccccgt ttgcttttaa cctaagggat  
 1200  
 gctgtgggttt ggttgactac atttgactac caccactgaa ggccggcgac gtctgaagcg  
 1260  
 gctggatacc gcaacgatgg aaaatcaggc gaggtactag cgtggagggc cgggctgcca  
 1320  
 ggtcaaggtc gtctgggttc tcaggagcca gtctgtgcca cagaaccatc ggcagctgcc  
 1380  
 ttcgtaaggc acctcggtct ggcattcgga aaaccacccc atcttgccag agtcccttgg  
 1440  
 tccttgggta gcaaaagccg tatgcgatct aaatcaagct ttcaatcatg a  
 1491

<210> 1670

<211> 132

<212> PRT

<213> Homo sapiens

<400> 1670

Met	Pro	Asp	Trp	Phe	Phe	Pro	Phe	Leu	Ala	Pro	Ser	Thr	Ser	Cys	His
1				5				10						15	
Asp	Ser	Pro	Ser	Glu	Asn	Thr	Ala	Pro	Pro	Leu	Pro	Phe	Ser	Val	Met
		20						25					30		
Ser	Ile	Cys	Ser	Thr	Pro	Gln	Pro	Leu	Ser	Arg	Ala	Gln	Val	Leu	Val
		35					40					45			
Ala	Glu	Gly	Lys	Ala	Val	Phe	Glu	Gly	Leu	Ser	Lys	Lys	Glu	Asp	Gly
	50					55					60				
Ala	Ala	Leu	Pro	Arg	Ala	Arg	Trp	Gln	Ser	Val	Cys	Ile	Ser	Val	Ser
	65				70					75				80	
Asn	Gln	Lys	Ser	Phe	Leu	Cys	Gly	Pro	His	Ser	Arg	Ser	His	Phe	Gln
			85						90					95	
Ala	Asn	Tyr	His	Gln	Gly	Trp	Glu	Arg	Gln	Gly	Leu	Gly	Ala	Glu	Leu
		100					105					110			
Gly	Ile	Thr	Arg	Leu	Arg	Arg	Gly	Trp	Ser	Phe	Arg	Cys	Ser	Phe	Pro
		115				120						125			
Cys	Ser	Val	Leu												
		130													

<210> 1671

<211> 432

<212> DNA

<213> Homo sapiens

<400> 1671

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tcgcgacgaa ggaagcccat ggctgaaacc acatcgccgg cacagcggaa acccacggcg  
 120  
 gcatccccga tgaagccggt gtcgcgggtc ggggacacga ttttcgctgg cgcctcgctc  
 180  
 gttattgcca tagccctggc cgtcatcgtc atcctgatgt tcgtcttcct catgaagacg  
 240  
 gcagccccga cgttggtggc taacaccgat aactttttca cgtccccggc ttggacaacg  
 300  
 gatcagaacc cgccggcctt tggatatccag gccctgctat ggacgacagt catctcatcc  
 360  
 ctgcttgccc tgctcatcgc agtgccgctc tcggtgggca tcgctctgtt tatcaccag  
 420  
 ctcgcaccta gg  
 432

<210> 1672

<211> 144

<212> PRT

<213> Homo sapiens

<400> 1672

Ala	Arg	Arg	Gly	Gly	Arg	Thr	Pro	Val	Val	Phe	Pro	Pro	Leu	Thr	Thr
1			5					10					15		
Thr	Arg	Pro	Leu	Ser	Arg	Arg	Arg	Lys	Pro	Met	Ala	Glu	Thr	Thr	Ser
		20						25				30			
Pro	Ala	Gln	Arg	Lys	Pro	Thr	Ala	Ala	Ser	Arg	Met	Lys	Pro	Val	Ser
		35					40					45			
Arg	Val	Gly	Asp	Thr	Ile	Phe	Ala	Gly	Ala	Ser	Ser	Val	Ile	Ala	Ile
	50					55					60				
Ala	Leu	Ala	Val	Ile	Val	Ile	Leu	Met	Phe	Val	Phe	Leu	Met	Lys	Thr
65					70					75				80	
Ala	Ala	Pro	Thr	Leu	Leu	Ala	Asn	Thr	Asp	Asn	Phe	Phe	Thr	Ser	Arg
			85						90					95	
Ala	Trp	Thr	Thr	Asp	Gln	Asn	Pro	Pro	Ala	Phe	Gly	Ile	Gln	Ala	Leu
		100					105						110		
Leu	Trp	Thr	Thr	Val	Ile	Ser	Ser	Leu	Leu	Ala	Leu	Leu	Ile	Ala	Val
		115					120					125			
Pro	Leu	Ser	Val	Gly	Ile	Ala	Leu	Phe	Ile	Thr	Gln	Leu	Ala	Pro	Arg
	130					135					140				

<210> 1673

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1673

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 gacctggcag tgaagctgct gatgaatgca cgacaaagac cagtttgctc cgtaacccca  
 120  
 ggctcccagc gtctttttcca tgagccaaag gcctggtcct ggaggggggt gccctgcagc  
 180  
 tctgctggcc ttcttccagg ggagttcatt gctgggggtg gccctgcagg gacctccact  
 240

gtgctgggga ggggaagaag aaggatgcaa cagggggagg ggagaatttg agaaaatagg  
 300  
 atgcaaattc tccacttggtg aataaagaaa tagagagcca ttgctaagaa ctatgtttac  
 360  
 gcagggttag tgctgggacc cagaaccagt caactggttt t  
 401

<210> 1674  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 1674  
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 1 5 10 15  
 Ser Gln Ile Leu Pro Ser Pro Cys Cys Ile Leu Leu Leu Pro Leu Pro  
 20 25 30  
 Ser Thr Val Glu Val Pro Ala Gly Pro Pro Pro Ala Met Asn Ser Pro  
 35 40 45  
 Gly Arg Arg Pro Ala Glu Leu Gln Gly Thr Pro Leu Gln Asp Gln Ala  
 50 55 60  
 Phe Gly Ser Trp Lys Arg Arg Trp Glu Pro Gly Val Thr Glu Gln Thr  
 65 70 75 80  
 Gly Leu Cys Arg Ala Phe Ile Ser Ser Phe Thr Ala Arg Ser Glu Tyr  
 85 90 95  
 Ile Lys Thr Gln Arg Pro Trp Gln Thr Pro Gln Arg Leu Glu Cys Ala  
 100 105 110  
 Arg

<210> 1675  
 <211> 500  
 <212> DNA  
 <213> Homo sapiens

<400> 1675  
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 60  
 gcgccaaacc caccgggcagc ctcccacacg cctctatagag cgctgctgga cagaatggct  
 120  
 tgattgtttg gcatgctctc aggatacccg tttagccagg aaacaccggg aggcttgcta  
 180  
 ctatgcgagc agccgacgca cgggtagagg gaattccac cacagtcct cgcactccac  
 240  
 ccgcacacgc cctgggaacc gtcaccgcg gtaccaccgg gtcaatcggc tccgcaaattg  
 300  
 cgaccgctgg atgtgccacc accccgcnc a tccgcagtgc gctccgtaac gccgtctgca  
 360  
 acaccgtccc ctccgtatct gccgacacct gtgccaacac ttgtaccgat gcatgcaccg  
 420  
 atgcagcaac aggcgtccg ctgcgtatcg atctgggata cggcgccgcc cctggacca  
 480  
 ctgttgagat ggctacgcgt  
 500

<210> 1676  
 <211> 97  
 <212> PRT  
 <213> Homo sapiens

<400> 1676  
 Arg Glu Phe Pro Pro Gln Ser Leu Ala Leu His Pro His Thr Pro Trp  
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 Glu Pro Ser Pro Ala Val Pro Pro Gly Gln Ser Ala Pro Gln Met Arg  
 20 25 30  
 Pro Leu Asp Val Pro Pro Pro Arg Xaa Ser Ala Val Arg Ser Val Thr  
 35 40 45  
 Pro Ser Ala Thr Pro Ser Pro Pro Tyr Leu Pro Thr Pro Val Pro Thr  
 50 55 60  
 Leu Val Pro Met His Ala Pro Met Gln Gln Gln Ala Leu Arg Ser Leu  
 65 70 75 80  
 Ser Ile Trp Asp Thr Ala Pro Pro Pro Gly Pro Leu Leu Arg Trp Leu  
 85 90 95  
 Arg

<210> 1677  
 <211> 631  
 <212> DNA  
 <213> Homo sapiens

<400> 1677  
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 gatttgcgcg gtacgggtgc ttctactggg tgtttgngac tggaatggtc cncgggggag  
 120  
 cagcaggatg ttgtgaccgc cgtggaatgg gcggcggtac agccgtggtc gaatggtcgg  
 180  
 gtggggcttt tcggtaaatc ctacgatggg gggacggggt cttattgctg caggtaatca  
 240  
 gccgcggggg ttggtgctg tggtggcgca ggagccagct atggagccct acacttacct  
 300  
 gtataacaat gaggtccttt actacaacgc tattggtacg agcctttctt atgatgagat  
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 tgctgcctcc cccggccgtg tccttcacga cactcccgaa tatatgaaga acagtgtcta  
 420  
 cgagggtggcc caccgcatt gcctgtccga caatttgcgt aattcttttag accccatccg  
 480  
 tagccacaaa taatgggagg gatcggtctt tccctcacca agacgcataa tttcccccg  
 540  
 gcccttgctt atttccgctg gccttattga ggacaatacg gagcctgatg gtttggtgga  
 600  
 attgttgaag gaccgtaagg ctccgacgcg t  
 631

<210> 1678  
 <211> 78  
 <212> PRT

<213> Homo sapiens

<400> 1678

Xaa	His	Asp	Phe	Leu	Asn	Asp	Ala	Lys	Val	Met	Glu	Ala	Gly	Tyr	Thr
1				5					10					15	
Trp	Val	Gln	Val	Asp	Leu	Arg	Gly	Thr	Gly	Ala	Ser	Thr	Gly	Cys	Leu
			20					25					30		
Xaa	Leu	Glu	Trp	Ser	Xaa	Gly	Glu	Gln	Gln	Asp	Val	Val	Thr	Ala	Val
		35					40					45			
Glu	Trp	Ala	Ala	Val	Gln	Pro	Trp	Ser	Asn	Gly	Arg	Val	Gly	Leu	Phe
	50					55					60				
Gly	Lys	Ser	Tyr	Asp	Gly	Gly	Thr	Gly	Ser	Tyr	Cys	Cys	Arg		
65					70				75						

<210> 1679

<211> 531

<212> DNA

<213> Homo sapiens

<400> 1679

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nctacttaga gcaaaggtag gaaaagaagg cagctaggcg tggctctcat tccttcccac
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agaatggatt ataagtcgag cctgatccag gatgggaatc ccatggagaa cttggagaag
120
cagctgatct gccctatctg cctggagatg tttaaccaagc cagtgggtcat cttgccgtgc
180
cagcacaacc tgtgccggaa gtgtgccaat gacatcttcc aggctgcaaa tccctactgg
240
accagccggg gcagctcagt gtccatgtct ggaggccggt tccgctgccc tacctgccgc
300
cacgaggtga tcatggatcg tcacggagtg tacggcctgc agaggaacct gctggtggag
360
aacatcatcg acatctacaa acaggagtg tccagtcggc cgctgcagaa gggcagtcac
420
cccatgtaca aggagcacga agatgagaaa atcaacatct actgtctcac gtgtgaggtg
480
cccacctgct ccatgtgcaa ggtgtttggg atccacaagg cctgcgaggt g
531

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<210> 1680

<211> 143

<212> PRT

<213> Homo sapiens

<400> 1680

Met	Glu	Asn	Leu	Glu	Lys	Gln	Leu	Ile	Cys	Pro	Ile	Cys	Leu	Glu	Met
1				5					10					15	
Phe	Thr	Lys	Pro	Val	Val	Ile	Leu	Pro	Cys	Gln	His	Asn	Leu	Cys	Arg
			20					25					30		
Lys	Cys	Ala	Asn	Asp	Ile	Phe	Gln	Ala	Ala	Asn	Pro	Tyr	Trp	Thr	Ser
		35					40					45			
Arg	Gly	Ser	Ser	Val	Ser	Met	Ser	Gly	Gly	Arg	Phe	Arg	Cys	Pro	Thr
	50					55				60					
Cys	Arg	His	Glu	Val	Ile	Met	Asp	Arg	His	Gly	Val	Tyr	Gly	Leu	Gln

65					70					75					80
Arg	Asn	Leu	Leu	Val	Glu	Asn	Ile	Ile	Asp	Ile	Tyr	Lys	Gln	Glu	Cys
				85					90					95	
Ser	Ser	Arg	Pro	Leu	Gln	Lys	Gly	Ser	His	Pro	Met	Tyr	Lys	Glu	His
			100					105					110		
Glu	Asp	Glu	Lys	Ile	Asn	Ile	Tyr	Cys	Leu	Thr	Cys	Glu	Val	Pro	Thr
		115					120					125			
Cys	Ser	Met	Cys	Lys	Val	Phe	Gly	Ile	His	Lys	Ala	Cys	Glu	Val	
	130					135				140					

<210> 1681  
 <211> 396  
 <212> DNA  
 <213> Homo sapiens

<400> 1681  
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 120  
 tgtgaggtct gcagcaagat gttctaccgc aaggacgtca tgctggacca ccagcgccgg  
 180  
 cacnctggaa ggagtgcggc gagtgaagcg nnagaggacc tggaggccgg tggggagaac  
 240  
 ctggtcggtt acaagaagga gccttccggg tgcccgggtgt gtggcaaggt gttctcctgc  
 300  
 cggagcaata tgaacaagca cctgctcacc cacggcgaca agaagtacac ctgcgagatc  
 360  
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 396

<210> 1682  
 <211> 132  
 <212> PRT  
 <213> Homo sapiens

<400> 1682															
Glu	Phe	His	Asn	Cys	Arg	Thr	Asp	Asp	Lys	Thr	Phe	Gln	Cys	Glu	Met
1				5					10				15		
Cys	Phe	Arg	Phe	Phe	Ser	Thr	Asn	Ser	Asn	Leu	Ser	Lys	His	Lys	Lys
			20					25				30			
Lys	His	Gly	Asp	Lys	Lys	Phe	Ala	Cys	Glu	Val	Cys	Ser	Lys	Met	Phe
		35				40					45				
Tyr	Arg	Lys	Asp	Val	Met	Leu	Asp	His	Gln	Arg	Arg	His	Xaa	Gly	Arg
	50				55				60						
Ser	Ala	Ala	Ser	Glu	Ala	Xaa	Glu	Asp	Leu	Glu	Ala	Gly	Gly	Glu	Asn
65				70				75				80			
Leu	Val	Arg	Tyr	Lys	Lys	Glu	Pro	Ser	Gly	Cys	Pro	Val	Cys	Gly	Lys
			85					90				95			
Val	Phe	Ser	Cys	Arg	Ser	Asn	Met	Asn	Lys	His	Leu	Leu	Thr	His	Gly
		100					105				110				
Asp	Lys	Lys	Tyr	Thr	Cys	Glu	Ile	Cys	Gly	Arg	Lys	Phe	Phe	Arg	Val
		115				120					125				
Asp	Val	Leu	Arg												

130

&lt;210&gt; 1683

&lt;211&gt; 676

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1683

```

nncggccgga caggccccga gcagccccgc ccaacatgga cccagacccc caggcgggcg
60
tgcaggtggg catgcgggtg gtgcgcggcg tggaccggaa gtggggccag caggacggcg
120
gcgagggcgg cgtgggcacg gtggtggagc ttggccgcca cggcagcccc tcgacacccg
180
accgcacagt ggtcgtgcag tgggaccagg gcacgcgcac caactaccgc gccggctacc
240
agggcgcgca cgacctgctg ctgtacgaca acgcccagat cggcgtccgg caccccaaca
300
tcattctgtg ctgctgcaag aagcacgggc tgcgggggat gcgctggaag tgccgtgtgt
360
gcctggacta cgacctctgc acgcagtgtc acatgcacaa caagcatgag ctgccccacg
420
ccttcgaccg ctacgagacc gctcactcgc gccctgtcac actgagtccc cgccagggcc
480
tcccagggat cccactaagg ggcattcttc agggagcgaa ggtggtgcga ggccccgact
540
gggagtgggg ctcacaggat ggtgagtgga ggcagagggg cggggtcagg gctgggctgt
600
ggctggctca tggctcagcc ttagcctgct gggggggcct ctttccccag gaggggaagg
660
aaaccggggc gccgga
676

```

&lt;210&gt; 1684

&lt;211&gt; 154

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1684

```

Xaa Gly Arg Thr Gly Pro Glu Gln Pro Arg Pro Thr Trp Thr Gln Thr
1      5      10      15
Pro Arg Arg Ala Cys Arg Trp Ala Cys Gly Trp Cys Ala Ala Trp Thr
20     25     30
Gly Ser Gly Ala Ser Arg Thr Ala Ala Arg Ala Ala Trp Ala Arg Trp
35     40     45
Trp Ser Leu Ala Ala Thr Ala Ala Pro Arg His Pro Thr Ala Gln Trp
50     55     60
Ser Cys Ser Gly Thr Arg Ala Arg Ala Pro Thr Thr Ala Pro Ala Thr
65     70     75     80
Arg Ala Arg Thr Thr Cys Cys Cys Thr Thr Pro Arg Ser Ala Ser
85     90     95
Gly Thr Pro Thr Ser Ser Val Thr Ala Ala Arg Ser Thr Gly Cys Gly
100    105    110
Gly Cys Ala Gly Ser Ala Val Cys Ala Trp Thr Thr Thr Ser Ala Arg

```

	115		120		125										
Ser	Ala	Thr	Cys	Thr	Thr	Ser	Met	Ser	Ser	Pro	Thr	Pro	Ser	Thr	Ala
	130					135					140				
Thr	Arg	Pro	Leu	Thr	Arg	Ala	Leu	Ser	His						
145						150									

&lt;210&gt; 1685

&lt;211&gt; 2740

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1685

```

ngaggaggag ccggcggcgg ctccggggaa agggaggggg gcgctccgca gccgccgccg
60
cccaggggct ggcgagggaa aggcgtacgc gctcagcaga ggggcggcag cggcggggag
120
ggggcctccc cttctccatc ctctctttct gcggggcaaaa ccccaggaac cggcagcaga
180
aactccggaa gcggcggtgc ggggggcggc agcgggtggtg gagggagcta ctggaaagaa
240
ggatgtctgc agtctgagct catccagttc catctcaaga aggagcgggc ggcagcggcg
300
gcggccgcgg ctcatatgca cgctaagaac ggcggcggca gcagtagccg cagctccccg
360
gtgtctggcc cccctgccgt ttgcgagacc ctggccgtcg cctccgcctc cccaatggcg
420
gcggcggcgg agggccccc gacagagcga gagggcagcg cgagcggcgg gggcatgcag
480
gcggcagcgc ccccttcgtc gcagccgcac ccgcagcagc tccaagagca ggaagaaatg
540
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600
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660
caggaaatgc gccacgagtt ggagagagcc aacaaaaact gccggatcct gcagtaccgc
720
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780
ctgttgcgca gcctggagca ggacctcaag gttgcaaagg atgtatctgt gagacttcac
840
catgaattag aaaatgtgga agaaaagaga acaacaacag aagatgaaaa tgagaaactg
900
aggcaacagc tcatagaagt tgaaattgca aagcaagctt tacagaatga actggaaaaa
960
atgaaagagt tatccttaaa aagaagagga agcaaagatt tgccaaaatc tgaaaaaaag
1020
gctcaacaga ctcccacaga ggaggacaat gaagatctga agtgccagct gcagtttgtt
1080
aaggaagaag ccgctttgat gagaaagaaa atggccaaga ttgataaaga aaaggacaga
1140
tttgaacacg agctccagaa gtacagatcc ttttatgggg atctggacag tcctttgccc
1200
aaaggagaag ccggaggccc tcccagcact agggaggccg agctcaagct acggctaagg
1260

```

ctggtggagg aagaagccaa catcctgggc aggaaaatcg tcgaactgga ggtggagaac  
1320  
agaggcctga aggcggaact ggacgacctt aggggcgatg acnnttcaac ggctcggcca  
1380  
accgctcat gaggnagca gagcgaatcc ctgtcggagc tgcggcagca cctgcagctg  
1440  
gtggaagacg agacggagct gctgctggagg aacgtggccg acctggagga gcagaacaag  
1500  
cgcatcacgg cggagctcaa caagtacaag tacaagnntc cggcggccac gacagcgcgc  
1560  
ggcaccacga caacgccana gaccgaggcc ctgcaggagg agctgaaggc ggcgcgcctg  
1620  
cagatcaacg agctcagcgg caaggtcatg cagctgcagt acgagaaccg cgtgcttatg  
1680  
tccaacatgc agcgtacga cctggcctcg cacctgggca tccgcggcag ccccgcgac  
1740  
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1800  
cgcaagcgcg aagggcccat cggcggcgag agcgactcgg aggaggtgnn cgcaacatcc  
1860  
gctgcctcan cgccactcg ctctttctac cggcgcccg ggccctggcc caagagcttc  
1920  
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1980  
gaccggtca tcgccgacac gagcaccatc atcaccgagg cgcgcacnt acgtggccaa  
2040  
cggggacctg ttnnccgact catggacgag gaggacgacg gcagccgcat cggggagcac  
2100  
gagctgctct accgcatcaa cgctcagatg aaggccttcc gcaaggagct gcagaccttc  
2160  
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2220  
gtgagtcaga tgttccagcc tatcatttta cttattctca ttcttgatt attttcatca  
2280  
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2340  
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2400  
aagacaagaa gtaaaagaag tataatttct gtagtaacca atgctataaa aacactgaag  
2460  
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2520  
ccaaacacta aaatatttca ggtaagaaag tgtgacattt ttctgtatga attgttttaa  
2580  
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2640  
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2700  
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2740

&lt;210&gt; 1686

&lt;211&gt; 463

&lt;212&gt; PRT



&lt;213&gt; Homo sapiens

&lt;400&gt; 1686

Xaa	Gly	Gly	Ala	Gly	Gly	Gly	Ser	Gly	Glu	Arg	Glu	Gly	Gly	Ala	Pro
1				5					10					15	
Gln	Pro	Pro	Pro	Pro	Arg	Gly	Trp	Arg	Gly	Lys	Gly	Val	Arg	Ala	Gln
			20					25				30			
Gln	Arg	Gly	Gly	Ser	Gly	Gly	Glu	Gly	Ala	Ser	Pro	Ser	Pro	Ser	Ser
		35				40					45				
Ser	Ser	Ala	Gly	Lys	Thr	Pro	Gly	Thr	Gly	Ser	Arg	Asn	Ser	Gly	Ser
	50					55					60				
Gly	Val	Ala	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Tyr	Trp	Lys	Glu
65					70					75					80
Gly	Cys	Leu	Gln	Ser	Glu	Leu	Ile	Gln	Phe	His	Leu	Lys	Lys	Glu	Arg
				85					90					95	
Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Gln	Met	His	Ala	Lys	Asn	Gly	Gly
			100					105					110		
Gly	Ser	Ser	Ser	Arg	Ser	Ser	Pro	Val	Ser	Gly	Pro	Pro	Ala	Val	Cys
		115				120						125			
Glu	Thr	Leu	Ala	Val	Ala	Ser	Ala	Ser	Pro	Met	Ala	Ala	Ala	Ala	Glu
	130					135					140				
Gly	Pro	Gln	Gln	Ser	Ala	Glu	Gly	Ser	Ala	Ser	Gly	Gly	Gly	Met	Gln
145					150					155					160
Ala	Ala	Ala	Pro	Pro	Ser	Ser	Gln	Pro	His	Pro	Gln	Gln	Leu	Gln	Glu
				165					170					175	
Gln	Glu	Glu	Met	Gln	Glu	Glu	Met	Glu	Lys	Leu	Arg	Glu	Glu	Asn	Glu
			180					185					190		
Thr	Leu	Lys	Asn	Glu	Ile	Asp	Glu	Leu	Arg	Thr	Glu	Met	Asp	Glu	Met
	195					200						205			
Arg	Asp	Thr	Phe	Phe	Glu	Glu	Asp	Ala	Cys	Gln	Leu	Gln	Glu	Met	Arg
	210				215						220				
His	Glu	Leu	Glu	Arg	Ala	Asn	Lys	Asn	Cys	Arg	Ile	Leu	Gln	Tyr	Arg
225					230					235					240
Leu	Arg	Lys	Ala	Glu	Arg	Lys	Arg	Leu	Arg	Tyr	Ala	Gln	Thr	Gly	Glu
				245					250					255	
Ile	Asp	Gly	Glu	Leu	Leu	Arg	Ser	Leu	Glu	Gln	Asp	Leu	Lys	Val	Ala
		260						265					270		
Lys	Asp	Val	Ser	Val	Arg	Leu	His	His	Glu	Leu	Glu	Asn	Val	Glu	Glu
	275						280					285			
Lys	Arg	Thr	Thr	Thr	Glu	Asp	Glu	Asn	Glu	Lys	Leu	Arg	Gln	Gln	Leu
	290					295					300				
Ile	Glu	Val	Glu	Ile	Ala	Lys	Gln	Ala	Leu	Gln	Asn	Glu	Leu	Glu	Lys
305					310					315					320
Met	Lys	Glu	Leu	Ser	Leu	Lys	Arg	Arg	Gly	Ser	Lys	Asp	Leu	Pro	Lys
				325					330				335		
Ser	Glu	Lys	Lys	Ala	Gln	Gln	Thr	Pro	Thr	Glu	Glu	Asp	Asn	Glu	Asp
			340					345					350		
Leu	Lys	Cys	Gln	Leu	Gln	Phe	Val	Lys	Glu	Glu	Ala	Ala	Leu	Met	Arg
		355					360					365			
Lys	Lys	Met	Ala	Lys	Ile	Asp	Lys	Glu	Lys	Asp	Arg	Phe	Glu	His	Glu
	370					375					380				
Leu	Gln	Lys	Tyr	Arg	Ser	Phe	Tyr	Gly	Asp	Leu	Asp	Ser	Pro	Leu	Pro
385					390					395					400
Lys	Gly	Glu	Ala	Gly	Gly	Pro	Pro	Ser	Thr	Arg	Glu	Ala	Glu	Leu	Lys

```

                405                410                415
Leu Arg Leu Arg Leu Val Glu Glu Glu Ala Asn Ile Leu Gly Arg Lys
                420                425                430
Ile Val Glu Leu Glu Val Glu Asn Arg Gly Leu Lys Ala Glu Leu Asp
                435                440                445
Asp Leu Arg Gly Asp Asp Xaa Ser Thr Ala Arg Pro Thr Arg Ser
                450                455                460

```

<210> 1687  
 <211> 326  
 <212> DNA  
 <213> Homo sapiens

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<400> 1687
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ggctcgctca agtatcacct tcagcggtcac caccgagagc agaagaacag tgcggggtcc
120
tgggcctccc ccagaacccc cgccaccttc ccagcggggc tcaactgcagc cgcagtcagg
180
agccaagcca actcaggcct cagccacctg ggtagagggc actgcaagta cccggcctcc
240
ttcgagcagc accggaccag ggtcccgtag gaagcctgct agccctggga ggaccctgcg
300
aaacggcgat gtggtgaagc cgaact
326

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<210> 1688  
 <211> 89  
 <212> PRT  
 <213> Homo sapiens

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<400> 1688
Val His Thr Gly Glu Arg Pro Tyr Lys Cys Pro His Cys Asp Tyr Ala
1      5      10      15
Gly Thr Gln Ser Gly Ser Leu Lys Tyr His Leu Gln Arg His His Arg
20     25     30
Glu Gln Lys Asn Ser Ala Gly Ser Trp Ala Ser Pro Arg Thr Pro Ala
35     40     45
Thr Phe Pro Ala Gly Leu Thr Ala Ala Ala Val Arg Ser Gln Ala Asn
50     55     60
Ser Gly Leu Ser His Leu Gly Arg Gly His Cys Lys Tyr Pro Ala Ser
65     70     75     80
Phe Glu Gln His Arg Thr Arg Val Pro
85

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<210> 1689  
 <211> 301  
 <212> DNA  
 <213> Homo sapiens

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<400> 1689
nggggaagcc atggctgctt aaggacaatg cactgtcagc tcggtgatgt cttgatttgg
60

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tctgggattc tgcacttagt aattgcagat aatactcatg tggcgccaag gaaaaaaaaa  
 120  
 ttggcctttt ccaggtccat taagcctaaa caaaccacat cactttacat caggcagatc  
 180  
 atgtggtacc agaattttcc agtttggcgg actatcttga tcaaatacaac taaattattg  
 240  
 ccactgtggc tatctgtgaa agaacacaat gaagaaaatc tggagcctta tctcatactc  
 300  
 a  
 301

<210> 1690

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1690

Met	His	Cys	Gln	Leu	Gly	Asp	Val	Leu	Ile	Trp	Ser	Gly	Ile	Leu	His
1				5					10					15	
Leu	Val	Ile	Ala	Asp	Asn	Thr	His	Val	Ala	Pro	Arg	Lys	Lys	Lys	Leu
			20					25					30		
Ala	Phe	Ser	Gln	Ser	Ile	Lys	Pro	Lys	Gln	Thr	Thr	Ser	Leu	Tyr	Ile
		35				40					45				
Arg	Gln	Ile	Met	Trp	Tyr	Gln	Asn	Phe	Pro	Val	Trp	Arg	Thr	Ile	Leu
	50					55					60				
Ile	Lys	Ser	Thr	Lys	Leu	Leu	Pro	Leu	Trp	Leu	Ser	Val	Lys	Glu	His
65					70					75				80	
Asn	Glu	Glu	Asn	Leu	Glu	Pro	Tyr	Leu	Ile	Leu					
				85					90						

<210> 1691

<211> 483

<212> DNA

<213> Homo sapiens

<400> 1691

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 120  
 ttcgaagaat tcaaacgcct ggacagtcac cagacccgcg ccgagaaagg cctgggcctg  
 180  
 ggctggcgca ttgccgacgg cttgtgccgc gtgctcgggc atcgcttgag cgtgcgttcg  
 240  
 tggccgggca agggcagcgt gttcagcgtg cgcgtgccgt tggcgcgcac ccaggtcagc  
 300  
 gcgcctgccca agccggcgca ggaaagcggc cagccgttga gtggcgcgca ggtgctgtgt  
 360  
 gtgaataaca aagaaagcat cctgatcggc atgcgcagct tgctcccgcg ctggggctgc  
 420  
 gaagtctggc ccgcgcgcga ccaggcgcaa tgtgccgcgc tgttggctga ggggtgtgcg  
 480  
 ccg  
 483

<210> 1692  
 <211> 161  
 <212> PRT  
 <213> Homo sapiens

<400> 1692  
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 1 5 10 15  
 Arg Arg Gly Glu Leu Cys Leu Glu Val Trp Asp Arg Gly Pro Gly Ile  
 20 25 30  
 Pro Gln Asp Lys Gln Lys Ser Phe Phe Glu Glu Phe Lys Arg Leu Asp  
 35 40 45  
 Ser His Gln Thr Arg Ala Glu Lys Gly Leu Gly Leu Gly Leu Ala Ile  
 50 55 60  
 Ala Asp Gly Leu Cys Arg Val Leu Gly His Arg Leu Ser Val Arg Ser  
 65 70 75 80  
 Trp Pro Gly Lys Gly Ser Val Phe Ser Val Arg Val Pro Leu Ala Arg  
 85 90 95  
 Thr Gln Val Ser Ala Pro Ala Lys Pro Ala Gln Glu Ser Gly Gln Pro  
 100 105 110  
 Leu Ser Gly Ala Gln Val Leu Cys Val Asn Asn Lys Glu Ser Ile Leu  
 115 120 125  
 Ile Gly Met Arg Ser Leu Leu Pro Arg Trp Gly Cys Glu Val Trp Pro  
 130 135 140  
 Ala Arg Asp Gln Ala Gln Cys Ala Ala Leu Leu Ala Glu Gly Val Arg  
 145 150 155 160  
 Pro

<210> 1693  
 <211> 333  
 <212> DNA  
 <213> Homo sapiens

<400> 1693  
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 60  
 cgaggattca agctactaca agtgtgacac agatgacacc ttcgaagccc gagaggagat  
 120  
 actggggggg atgaggcctt cgacactgcc aactcctcca tcgtgtctgg cgagagtatc  
 180  
 cgtttttttg tcaatgtcaa ccttgagatg caggccacca aactgagaa tgaagcgact  
 240  
 tccggtggct gtgtgctcct gcacacctcc cgaaaggcca gcatcgtcct gaacgagacg  
 300  
 gccacctccc tggataacgt gctgoggacc atg  
 333

<210> 1694  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 1694

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Met Val Arg Ser Thr Leu Ser Arg Glu Val Ala Val Ser Phe Arg Thr
 1           5           10           15
Met Leu Ala Phe Arg Glu Val Cys Arg Ser Thr Gln Pro Pro Glu Val
           20           25           30
Ala Ser Phe Ser Val Leu Val Ala Cys Ile Ser Arg Leu Thr Leu Thr
           35           40           45
Lys Lys Arg Ile Leu Ser Pro Asp Thr Met Glu Glu Leu Ala Val Ser
           50           55           60
Lys Ala Ser Ser Pro Pro Val Ser Pro Leu Gly Leu Arg Arg Cys His
65           70           75           80
Leu Cys His Thr Cys Ser Ser Leu Asn Pro Arg Ser Ile Gln Ser Ala
           85           90           95
Thr Trp Trp Glu Ser Phe Arg Thr Ala Ala Asp Gly Thr Arg
           100           105           110

```

&lt;210&gt; 1695

&lt;211&gt; 485

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1695

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tgatcagctt tatcaggagt ttttgcaagt accgcagatt tatgttgaat cctagtaagc
60
gccaggaatt tgaagactat cttcaccagg aaatgcaaaa tagcaaggaa aatttcacca
120
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&lt;210&gt; 1696

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1696

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Arg Ala Tyr Asn Glu Asn Asp Val Ile Leu Met Arg Ser Lys Met Asn
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Val Leu Ser Glu Pro Ala Gly Gln Arg Arg Gln Pro Leu Arg Pro Leu
      35      40      45
Leu Lys Pro Cys Ala Ile Thr Ala Ala Ala Pro Val Val Pro Arg Arg
      50      55      60
Gln Leu Leu Ala Phe Pro Leu Gly Val Glu Phe Ala Gly Ser Pro Ile
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 <213> Homo sapiens

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 Thr Met His Glu Leu Glu Gly Glu Pro Phe Phe Ala Asp Pro Arg Glu  
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&lt;400&gt; 1701

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<213> Homo sapiens

<400> 1702

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Ala	Gly	Phe	Leu	Asp	Leu	Lys	Asp	Phe	Leu	Pro	Lys	Glu	Tyr	Val	Lys
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Gln	Lys	Gly	Glu	Arg	Lys	Ile	Phe	Gln	Ala	His	Lys	Asn	Cys	Gly	Gln
		275					280					285			
Met	Ser	Glu	Ile	Glu	Ala	Lys	Val	Arg	Tyr	Val	Lys	Leu	Ala	Arg	Ser
	290					295					300				
Leu	Lys	Thr	Tyr	Gly	Val	Ser	Phe	Phe	Leu	Val	Lys	Glu	Lys	Met	Lys

305					310					315				320
Gly	Lys	Asn	Lys	Leu	Val	Pro	Arg	Leu	Leu	Gly	Ile	Thr	Lys	Glu
				325					330					335
Val	Met	Arg	Val	Asp	Glu	Lys	Thr	Lys	Glu	Val	Ile	Gln	Glu	Trp
			340					345					350	
Leu	Thr	Asn	Ile	Lys	Arg	Trp	Ala	Ala	Ser	Pro	Lys	Ser	Phe	Thr
		355					360					365		
Asp	Phe	Gly	Asp	Tyr	Gln	Asp	Gly	Tyr	Tyr	Ser	Val	Gln	Thr	Thr
	370					375				380				
Gly	Glu	Gln	Ile	Ala	Gln	Leu	Ile	Ala	Gly	Tyr	Ile	Asp	Ile	Ile
385					390					395				400
Lys	Lys	Lys	Lys	Ser	Lys	Asp	His	Phe	Gly	Leu	Glu	Gly	Asp	Glu
				405					410				415	
Ser	Thr	Met	Leu	Glu	Asp	Ser	Val	Ser	Pro	Lys	Lys	Ser	Thr	Val
		420						425					430	
Gln	Gln	Gln	Tyr	Asn	Arg	Val	Gly	Lys	Val	Glu	His	Gly	Ser	Val
		435					440					445		
Leu	Pro	Ala	Ile	Met	Arg	Ser	Gly	Ala	Ser	Gly	Pro	Glu	Asn	Phe
	450					455				460				
Val	Gly	Ser	Met	Pro	Pro	Ala	Gln	Gln	Gln	Ile	Thr	Ser	Gly	Gln
465					470					475				480
His	Arg	Gly	His	Met	Pro	Pro	Leu	Thr	Ser	Ala	Gln	Gln	Ala	Leu
			485						490					495
Gly	Thr	Ile	Asn	Ser	Ser	Met	Gln	Ala	Val	Gln	Ala	Ala	Gln	Ala
		500						505					510	
Leu	Asp	Asp	Phe	Asp	Thr	Leu	Pro	Pro	Leu	Gly	Gln	Asp	Ala	Ala
	515						520					525		
Lys	Ala	Trp	Arg	Lys	Asn	Lys	Met	Asp	Glu	Ser	Lys	His	Glu	Ile
	530					535					540			
Ser	Gln	Val	Asp	Ala	Ile	Thr	Ala	Gly	Thr	Ala	Ser	Val	Val	Asn
545					550					555				560
Thr	Ala	Gly	Asp	Pro	Ala	Glu	Thr	Asp	Tyr	Thr	Ala	Val	Gly	Cys
			565					570					575	
Val	Thr	Thr	Ile	Ser	Ser	Asn	Leu	Thr	Glu	Met	Ser	Arg	Gly	Val
		580						585					590	
Leu	Leu	Ala	Ala	Leu	Leu	Glu	Asp	Gly	Gly	Ser	Gly	Arg	Pro	Leu
	595						600				605			
Leu	Gln	Ala	Ala	Lys	Gly	Leu	Ala	Gly	Ala	Val	Ser	Glu	Leu	Leu
	610					615					620			
Ser	Ala	Gln	Pro	Ala	Ser	Ala	Glu	Pro	Arg	Gln	Asn	Leu	Leu	Gln
625					630					635				640
Ala	Gly	Asn	Val	Gly	Gln	Ala	Ser	Gly	Glu	Leu	Leu	Gln	Gln	Ile
			645					650					655	
Glu	Ser	Asp	Thr	Asp	Pro	His	Phe	Gln	Asp	Ala	Leu	Met	Gln	Leu
		660					665					670		
Lys	Ala	Val	Ala	Ser	Ala	Ala	Ala	Ala	Leu	Val	Leu	Lys	Ala	Lys
	675						680					685		
Val	Ala	Gln	Arg	Thr	Glu	Asp	Ser	Gly	Leu	Gln	Thr	Gln	Val	Ile
	690					695				700				
Ala	Ala	Thr	Gln	Cys	Ala	Leu	Ser	Thr	Ser	Gln	Leu	Val	Ala	Cys
705					710				715					720
Lys	Val	Val	Ala	Pro	Thr	Ile	Ser	Ser	Pro	Val	Cys	Gln	Glu	Gln
			725					730					735	
Val	Glu	Ala	Gly	Arg	Leu	Val	Ala	Lys	Ala	Val	Lys	Gly	Cys	Val

			740					745				750			
Ala	Ser	Gln	Ala	Ala	Thr	Glu	Asp	Gly	Gln	Leu	Leu	Arg	Gly	Val	Gly
		755					760					765			
Ala	Ala	Ala	Thr	Ala	Val	Thr	Gln	Ala	Leu	Asn	Glu	Leu	Leu	Gln	His
		770					775					780			
Val	Lys	Ala	His	Ala	Thr	Gly	Ala	Gly	Pro	Ala	Gly	Arg	Tyr	Asp	Gln
					790					795					800
Ala	Thr	Asp	Thr	Ile	Leu	Thr	Val	Thr	Glu	Asn	Ile	Phe	Ser	Ser	Met
				805					810						815
Gly	Asp	Ala	Gly	Glu	Met	Val	Arg	Gln	Ala	Arg	Ile	Leu	Ala	Gln	Ala
			820					825					830		
Thr	Ser	Asp	Leu	Val	Asn	Ala	Ile	Lys	Ala	Asp	Ala	Glu	Gly	Glu	Ser
		835					840					845			
Asp	Leu	Glu	Asn	Ser	Arg	Lys	Leu	Leu	Ser	Ala	Ala	Lys	Ile	Leu	Ala
		850				855				860					
Asp	Ala	Thr	Ala	Lys	Met	Val	Glu	Ala	Ala	Lys	Gly	Ala	Ala	Ala	His
		865			870					875					880
Pro	Asp	Ser	Glu	Glu	Gln	Gln	Gln	Arg	Leu	Arg	Glu	Ala	Ala	Glu	Gly
			885					890						895	
Leu	Arg	Met	Ala	Thr	Asn	Ala	Ala	Ala	Gln	Asn	Ala	Ile	Lys	Lys	Lys
		900					905						910		
Leu	Val	Gln	Arg	Leu	Glu	His	Ala	Ala	Lys	Gln	Ala	Ala	Ala	Ser	Ala
		915					920					925			
Thr	Gln	Thr	Ile	Ala	Ala	Ala	Gln	His	Ala	Ala	Ser	Ala	Pro	Lys	Ala
		930				935					940				
Ser	Ala	Gly	Pro	Gln	Pro	Leu	Leu	Val	Gln	Ser	Cys	Lys	Ala	Val	Ala
				950					955						960
Glu	Gln	Ile	Pro	Leu	Val	Gln	Gly	Val	Arg	Gly	Ser	Gln	Ala	Gln	
			965				970						975		
Pro	Asp	Ser	Pro	Ser	Ala	Gln	Leu	Ala	Leu	Ile	Ala	Ala	Ser	Gln	Ser
		980					985						990		
Phe	Leu	Gln	Pro	Gly	Gly	Lys	Met	Val	Ala	Ala	Ala	Lys	Ala	Ser	Val
		995				1000						1005			
Pro	Thr	Ile	Gln	Asp	Gln	Ala	Ser	Ala	Met	Gln	Leu	Ser	Gln	Cys	Ala
		1010			1015						1020				
Lys	Asn	Leu	Gly	Thr	Ala	Leu	Ala	Glu	Leu	Arg	Thr	Ala	Ala	Gln	Lys
		1025			1030					1035					1040
Ala	Gln	Glu	Ala	Cys	Gly	Pro	Leu	Glu	Met	Asp	Ser	Ala	Leu	Ser	Val
			1045					1050					1055		
Val	Gln	Asn	Leu	Glu	Lys	Asp	Leu	Gln	Glu	Val	Lys	Ala	Ala	Ala	Arg
		1060					1065					1070			
Asp	Gly	Lys	Leu	Lys	Pro	Leu	Pro	Gly	Glu	Thr	Met	Glu	Lys	Cys	Thr
		1075				1080						1085			
Gln	Asp	Leu	Gly	Asn	Ser	Thr	Lys	Ala	Val	Ser	Ser	Ala	Ile	Ala	Gln
		1090			1095						1100				
Leu	Leu	Gly	Glu	Val	Ala	Gln	Gly	Asn	Glu	Asn	Tyr	Ala	Gly	Ile	Ala
		1105			1110					1115					1120
Ala	Arg	Asp	Val	Ala	Gly	Gly	Leu	Arg	Ser	Leu	Ala	Gln	Ala	Ala	Arg
			1125				1130						1135		
Gly	Val	Ala	Ala	Leu	Thr	Ser	Asp	Pro	Ala	Val	Gln	Ala	Ile	Val	Leu
		1140					1145					1150			
Asp	Thr	Ala	Ser	Asp	Val	Leu	Asp	Lys	Ala	Ser	Ser	Leu	Ile	Glu	Glu
		1155				1160						1165			
Ala	Lys	Lys	Ala	Ala	Gly	His	Pro	Gly	Asp	Pro	Glu	Ser	Gln	Gln	Arg

1170	1175	1180
Leu Ala Gln Val Ala Lys Ala Val Thr Gln Ala Leu Asn Arg Cys Val		
1185	1190	1195
Ser Cys Leu Pro Gly Gln Arg Asp Val Asp Asn Ala Leu Arg Ala Val		1200
	1205	1210
Gly Asp Ala Ser Lys Arg Leu Leu Ser Asp Ser Leu Pro Pro Ser Thr		1215
	1220	1225
Gly Thr Phe Gln Glu Ala Gln Ser Arg Leu Asn Glu Ala Ala Ala Gly		1230
	1235	1240
Leu Asn Gln Ala Ala Thr Glu Leu Val Gln Ala Ser Arg Gly Thr Pro		1245
	1250	1255
Gln Asp Leu Ala Arg Ala Ser Gly Arg Phe Gly Gln Asp Phe Ser Thr		1260
1265	1270	1275
Phe Leu Glu Ala Gly Val Glu Met Ala Gly Gln Ala Pro Ser Gln Glu		1280
	1285	1290
Asp Arg Ala Gln Val Val Ser Asn Leu Lys Gly Ile Ser Met Ser Ser		1295
	1300	1305
Ser Lys Leu Leu Leu Ala Ala Lys Ala Leu Ser Thr Asp Pro Ala Ala		1310
	1315	1320
Pro Asn Leu Lys Ser Gln Leu Ala Ala Ala Arg Ala Val Thr Asp		1325
	1330	1335
Ser Ile Asn Gln Leu Ile Thr Met Cys Thr Gln Gln Ala Pro Gly Gln		1340
1345	1350	1355
Lys Glu Cys Asp Asn Ala Leu Arg Glu Leu Glu Thr Val Arg Glu Leu		1360
	1365	1370
Leu Glu Asn Pro Val Gln Pro Ile Asn Asp Met Ser Tyr Phe Gly Cys		1375
	1380	1385
Leu Asp Ser Val Met Glu Asn Ser Lys Val Leu Gly Glu Ala Met Thr		1390
	1395	1400
Gly Ile Ser Gln Asn Ala Lys Asn Gly Asn Leu Pro Glu Phe Gly Asp		1405
	1410	1415
Ala Ile Ser Thr Ala Ser Lys Ala Leu Cys Gly Phe Thr Glu Ala Ala		1420
1425	1430	1435
Ala Gln Ala Ala Tyr Leu Val Gly Val Ser Asp Pro Asn Ser Gln Ala		1440
	1445	1450
Gly Gln Gln Gly Leu Val Glu Pro Thr Gln Phe Ala Arg Ala Asn Gln		1455
	1460	1465
Ala Ile Gln Met Ala Cys Gln Ser Leu Gly Glu Pro Gly Cys Thr Gln		1470
	1475	1480
Ala Gln Val Leu Ser Ala Ala Thr Ile Val Ala Lys His Thr Ser Ala		1485
	1490	1495
Leu Cys Asn Ser Cys Arg Leu Ala Ser Ala Arg Thr Thr Asn Pro Thr		1500
1505	1510	1515
Ala Lys Arg Gln Phe Val Gln Ser Ala Lys Glu Val Ala Asn Ser Thr		1520
	1525	1530
Ala Asn Leu Val Lys Thr Ile Lys Ala Leu Asp Gly Ala Phe Thr Glu		1535
	1540	1545
Glu Asn Arg Ala Gln Cys Arg Ala Ala Thr Ala Pro Leu Leu Glu Ala		1550
	1555	1560
Val Asp Asn Leu Ser Ala Phe Ala Ser Asn Pro Glu Phe Ser Ser Ile		1565
	1570	1575
Pro Ala Gln Ile Ser Pro Glu Gly Arg Ala Ala Met Glu Pro Ile Val		1580
1585	1590	1595
Ile Ser Ala Lys Thr Met Leu Glu Ser Ala Gly Gly Leu Ile Gln Thr		1600



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Ala	Arg	Ala	Leu	Ala	Val	Asn	Pro	Arg	Asp	Pro	Pro	Ser	Trp	Ser	Val								
			1620						1625			1630											
Leu	Ala	Gly	His	Ser	Arg	Thr	Val	Ser	Asp	Ser	Ile	Lys	Lys	Leu	Ile								
			1635						1640			1645											
Thr	Ser	Met	Arg	Asp	Lys	Ala	Pro	Gly	Gln	Leu	Glu	Cys	Glu	Thr	Ala								
			1650						1655			1660											
Ile	Ala	Ala	Leu	Asn	Ser	Cys	Leu	Arg	Asp	Leu	Asp	Gln	Ala	Ser	Leu								
1665						1670						1675			1680								
Ala	Ala	Val	Ser	Gln	Gln	Leu	Ala	Pro	Arg	Glu	Gly	Ile	Ser	Gln	Glu								
			1685						1690			1695											
Ala	Leu	His	Thr	Gln	Met	Leu	Thr	Ala	Val	Gln	Glu	Ile	Ser	His	Leu								
			1700						1705			1710											
Ile	Glu	Pro	Leu	Ala	Asn	Ala	Ala	Arg	Ala	Glu	Ala	Ser	Gln	Leu	Gly								
			1715						1720			1725											
His	Lys	Val	Ser	Gln	Met	Ala	Gln	Tyr	Phe	Glu	Pro	Leu	Thr	Leu	Ala								
			1730						1735			1740											
Ala	Val	Gly	Ala	Ala	Ser	Lys	Thr	Leu	Ser	His	Pro	Gln	Gln	Met	Ala								
1745						1750						1755			1760								
Leu	Leu	Asp	Gln	Thr	Lys	Thr	Leu	Ala	Glu	Ser	Ala	Leu	Gln	Leu	Leu								
			1765						1770			1775											
Tyr	Thr	Ala	Lys	Glu	Ala	Gly	Gly	Asn	Pro	Lys	Gln	Ala	Ala	His	Thr								
			1780						1785			1790											
Gln	Glu	Ala	Leu	Glu	Glu	Ala	Val	Gln	Met	Met	Thr	Glu	Ala	Val	Glu								
			1795						1800			1805											
Asp	Leu	Thr	Thr	Thr	Leu	Asn	Glu	Ala	Ala	Ser	Ala	Ala	Gly	Val	Val								
			1810						1815			1820											
Gly	Gly	Met	Val	Asp	Ser	Ile	Thr	Gln	Ala	Ile	Asn	Gln	Leu	Asp	Glu								
1825						1830						1835			1840								
Gly	Pro	Met	Gly	Glu	Pro	Glu	Gly	Ser	Phe	Val	Asp	Tyr	Gln	Thr	Thr								
			1845						1850			1855											
Met	Val	Arg	Thr	Ala	Lys	Ala	Ile	Ala	Val	Thr	Val	Gln	Glu	Met	Val								
			1860						1865			1870											
Thr	Lys	Ser	Asn	Thr	Ser	Pro	Glu	Glu	Leu	Gly	Pro	Leu	Ala	Asn	Gln								
			1875						1880			1885											
Leu	Thr	Ser	Asp	Tyr	Gly	Arg	Leu	Ala	Ser	Glu	Ala	Lys	Pro	Ala	Ala								
			1890						1895			1900											
Val	Ala	Ala	Glu	Asn	Glu	Glu	Ile	Gly	Ser	His	Ile	Lys	His	Arg	Val								
1905						1910						1915			1920								
Gln	Glu	Leu	Gly	His	Gly	Cys	Ala	Ala	Leu	Val	Thr	Lys	Ala	Gly	Ala								
			1925						1930			1935											
Leu	Gln	Cys	Ser	Pro	Ser	Asp	Ala	Tyr	Thr	Lys	Lys	Glu	Leu	Ile	Glu								
			1940						1945			1950											
Cys	Ala	Arg	Val	Ser	Glu	Lys	Val	Ser	His	Val	Leu	Ala	Ala	Leu									
			1955						1960			1965											
Gln	Ala	Gly	Asn	Arg	Gly	Thr	Gln	Ala	Cys	Ile	Thr	Ala	Ala	Ser	Ala								
			1970						1975			1980											
Val	Ser	Gly																					

2035	2040	2045
Gln Ser Ser Val Ala Thr Ile Thr Arg Leu Ala Asp Val Val Lys Leu		
2050	2055	2060
Gly Ala Ala Ser Leu Gly Ala Glu Asp Pro Glu Thr Gln Val Val Leu		
2065	2070	2075
Ile Asn Ala Val Lys Asp Val Ala Lys Ala Leu Gly Asp Leu Ile Ser		2080
2085	2090	2095
Ala Thr Lys Ala Ala Ala Gly Lys Val Gly Asp Asp Pro Ala Val Trp		
2100	2105	2110
Gln Leu Lys Asn Ser Ala Lys Val Met Val Thr Asn Val Thr Ser Leu		
2115	2120	2125
Leu Lys Thr Val Lys Ala Val Glu Asp Glu Ala Thr Lys Gly Thr Arg		
2130	2135	2140
Ala Leu Glu Ala Thr Thr Glu His Ile Arg Gln Glu Leu Ala Val Phe		
2145	2150	2155
Cys Ser Pro Glu Pro Pro Ala Lys Thr Ser Thr Pro Glu Asp Phe Ile		2160
2165	2170	2175
Arg Met Thr Lys Gly Ile Thr Met Ala Thr Ala Lys Ala Val Ala Ala		
2180	2185	2190
Gly Asn Ser Cys Arg Gln Glu Asp Val Ile Ala Thr Ala Asn Leu Ser		
2195	2200	2205
Arg Arg Ala Ile Ala Asp Met Leu Arg Ala Cys Lys Glu Ala Ala Tyr		
2210	2215	2220
His Pro Glu Val Ala Pro Asp Val Arg Leu Arg Ala Leu His Tyr Gly		
2225	2230	2235
Arg Glu Cys Ala Asn Gly Tyr Leu Glu Leu Leu Asp His Val Leu Leu		2240
2245	2250	2255
Thr Leu Gln Lys Pro Ser Pro Glu Leu Lys Gln Gln Leu Thr Gly His		
2260	2265	2270
Ser Lys Arg Val Ala Gly Ser Val Thr Glu Leu Ile Gln Ala Ala Glu		
2275	2280	2285
Ala Met Lys Gly Thr Glu Trp Val Asp Pro Glu Asp Pro Thr Val Ile		
2290	2295	2300
Ala Glu Asn Glu Leu Leu Gly Ala Ala Ala Ala Ile Glu Ala Ala Ala		
2305	2310	2315
Lys Lys Leu Glu Gln Leu Lys Pro Arg Ala Lys Pro Lys Glu Ala Asp		2320
2325	2330	2335
Glu Ser Leu Asn Phe Glu Glu Gln Ile Leu Glu Ala Ala Lys Ser Ile		
2340	2345	2350
Ala Ala Ala Thr Ser Ala Leu Val Lys Ala Ala Ser Ala Ala Gln Arg		
2355	2360	2365
Glu Leu Val Ala Gln Gly Lys Val Gly Ala Ile Pro Ala Asn Ala Leu		
2370	2375	2380
Asp Asp Gly Gln Trp Ser Gln Gly Leu Ile Ser Ala Ala Arg Met Val		
2385	2390	2395
Ala Ala Ala Thr Asn Asn Leu Cys Glu Ala Ala Asn Ala Ala Val Gln		2400
2405	2410	2415
Gly His Ala Ser Gln Glu Lys Leu Ile Ser Ser Ala Lys Gln Val Ala		
2420	2425	2430
Ala Ser Thr Ala Gln Leu Leu Val Ala Cys Lys Val Lys Ala Asp Gln		
2435	2440	2445
Asp Ser Glu Ala Met Lys Arg Leu Gln Ala Ala Gly Asn Ala Val Lys		
2450	2455	2460
Arg Ala Ser Asp Asn Leu Val Lys Ala Ala Gln Lys Ala Ala Phe		

2465	2470	2475	2480
Glu Glu Gln Glu Asn Glu Thr Val Val Val Lys Glu Lys Met Val Gly			
	2485	2490	2495
Gly Ile Ala Gln Ile Ile Ala Ala Gln Glu Glu Met Leu Arg Lys Glu			
	2500	2505	2510
Arg Glu Leu Glu Glu Ala Arg Lys Lys Leu Ala Gln Ile Arg Gln Gln			
	2515	2520	2525
Gln Tyr Lys Phe Leu Pro Ser Glu Leu Arg Asp Glu His			
2530	2535	2540	

<210> 1703  
 <211> 346  
 <212> DNA  
 <213> Homo sapiens

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 120  
 tctgctctac ccttctccat gactgctgcc tggctctgtcc tagccttgct ctgatccaca  
 180  
 ctgagctggc cttgagcagg gtcgcacctg tacatgaaga caatggctgg tttctcactg  
 240  
 gactctcctt tcgcctctgt gaaccagtga tggcgctgaa ctggaggaag aggcagcatg  
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 346

<210> 1704  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

Met Asp Gly Thr Val Ile His Met Leu Pro Leu Pro Pro Val Gln Arg	
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His His Trp Phe Thr Glu Ala Lys Gly Glu Ser Ser Glu Lys Pro Ala	
	20 25 30
Ile Val Phe Met Tyr Arg Cys Asp Pro Ala Gln Gly Gln Leu Ser Val	
	35 40 45
Asp Gln Ser Lys Ala Arg Thr Asp Gln Ala Ala Val Met Glu Lys Gly	
	50 55 60
Arg Ala Glu Asn Ala Leu Leu Gln Asp Ser Glu Lys Lys Arg Ser His	
65	70 75 80
Ser Ser Pro Ser Gln Ile Pro Lys Lys Ile Leu Ser His Met Thr His	
	85 90 95
Glu Val Thr Glu Asp Phe Ser Pro Arg Asp	
	100 105

<210> 1705  
 <211> 377  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1705

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120  
ctggtgctcc aatcgagttg cagaaaggta tacaggggtg agcaagtta tttaatcctg  
180  
gttttggctg gaacaaaaat ccacaagttc aaaccttgaa gaattctcaa ggttctattc  
240  
ataatttagt gaggtctgga gttactgttg aaaggaaagt taatgtaggg gcacaaggag  
300  
cttttaactc tgcccctgca ccacagatgg aatttccac agttcctcca tacaaccct  
360  
cttccttcgg agctagc  
377

&lt;210&gt; 1706

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1706

Met	Asp	Lys	Thr	Lys	Pro	Ser	Asn	Pro	Phe	Ser	Met	Gly	Gln	Ile	Pro
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Asn	Phe	Pro	Glu	Gly	Leu	Ala	Ser	Thr	Gly	Ala	Pro	Ile	Glu	Leu	Gln
			20					25					30		
Lys	Gly	Ile	Gln	Gly	Gly	Ala	Ser	Leu	Phe	Asn	Pro	Gly	Phe	Gly	Trp
		35					40					45			
Asn	Gln	Asn	Pro	Gln	Val	Gln	Thr	Leu	Lys	Asn	Ser	Gln	Gly	Ser	Ile
	50					55					60				
His	Asn	Leu	Val	Arg	Ser	Gly	Val	Thr	Val	Glu	Arg	Lys	Val	Asn	Val
65				70						75				80	
Gly	Ala	Gln	Gly	Ala	Phe	Asn	Ser	Ala	Pro	Ala	Pro	Gln	Met	Glu	Phe
			85					90					95		
Pro	Thr	Val	Pro	Pro	Tyr	Asn	Pro	Ser	Ser	Phe	Gly	Ala	Ser		
			100					105					110		

&lt;210&gt; 1707

&lt;211&gt; 427

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1707

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catcacgcca agcgagtgt catcatcggg gccgggctag ccggcatgga ggctgcgcga  
120  
gttctcagcg aacgcgcaca cgaacctctc atcgtcgagg ccagcgacca cattggcgga  
180  
gtcatccttg cgggtgggtca accttccttc aaggaggacg acctagctct gctggagtgg  
240  
taccgcacca ccttgaggga gttgggcgtg gagattcgac tcaacaccac cgtaacggct  
300

gatcttatcg cttccttcgg ggccgatcac gtcgtcctgg cgaccggatc gaggccgcgt  
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 427

<210> 1708  
 <211> 142  
 <212> PRT  
 <213> Homo sapiens

<400> 1708  
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 Leu Ala Gly Met Glu Ala Ala Arg Val Leu Ser Glu Arg Ala His Glu  
 35 40 45  
 Pro Leu Ile Val Glu Ala Ser Asp His Ile Gly Gly Val Ile Leu Ala  
 50 55 60  
 Gly Gly Gln Pro Ser Phe Lys Glu Asp Asp Leu Ala Leu Leu Glu Trp  
 65 70 75 80  
 Tyr Arg Thr Thr Leu Glu Glu Leu Gly Val Glu Ile Arg Leu Asn Thr  
 85 90 95  
 Thr Val Thr Ala Asp Leu Ile Ala Ser Phe Gly Ala Asp His Val Val  
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 Leu Ala Thr Gly Ser Arg Pro Arg Arg Leu Asp Leu Gly Asp Asp Ala  
 115 120 125  
 Lys Val Ile Asp Ala Thr Asp Ala Leu Leu Asn Arg Asp Ala  
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<210> 1709  
 <211> 446  
 <212> DNA  
 <213> Homo sapiens

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 ctgttctttt ctgactgatg actgggagtc agggaagatg aatgcagagt ctgtgatcac  
 120  
 ctctcttcc agccacatca tatctcagcc tcctggagga aactcccata gcttgtctct  
 180  
 tcagtcccag ttgacagctt ctgaacgttt ccaagagaat agttcggatc attcagaaac  
 240  
 caggttggtg caagagggtc tctttcaggc aatcctgctt gctgtgtgct taatcatttc  
 300  
 tgcattgtgca agatgggtta tgggagaaat attagccagt gtcttcacat gtcattgat  
 360  
 gataactgta gcttatgtga aatcattgtt tctcagcctt gccagctatt tcaaaaccac  
 420  
 tgcctgtgct cggtttgtca aaattt  
 446

<210> 1710  
 <211> 116  
 <212> PRT  
 <213> Homo sapiens

<400> 1710  
 Met Asn Ala Glu Ser Val Ile Thr Ser Ser Ser Ser His Ile Ile Ser  
 1 5 10 15  
 Gln Pro Pro Gly Gly Asn Ser His Ser Leu Ser Leu Gln Ser Gln Leu  
 20 25 30  
 Thr Ala Ser Glu Arg Phe Gln Glu Asn Ser Ser Asp His Ser Glu Thr  
 35 40 45  
 Arg Leu Leu Gln Glu Val Phe Phe Gln Ala Ile Leu Leu Ala Val Cys  
 50 55 60  
 Leu Ile Ile Ser Ala Cys Ala Arg Trp Val Met Gly Glu Ile Leu Ala  
 65 70 75 80  
 Ser Val Phe Thr Cys Ser Leu Met Ile Thr Val Ala Tyr Val Lys Ser  
 85 90 95  
 Leu Phe Leu Ser Leu Ala Ser Tyr Phe Lys Thr Thr Ala Cys Ala Arg  
 100 105 110  
 Phe Val Lys Ile  
 115

<210> 1711  
 <211> 426  
 <212> DNA  
 <213> Homo sapiens

<400> 1711  
 nggggggattc atgttagtat ttgtcagaaa aggcttttga aagagccaaa ttaaaaagag  
 60  
 cactagaaca tgaacaggga aagcagagga aatacttgta gaaagtatatt ttacagctc  
 120  
 cctcaataca attcagtaat gttcattcct ggtgagaagt ctgtccgcac acacagcatc  
 180  
 agccaagcag cagaagcagt ggtgtctggg gggctgggaa gtttttcccc caaatacca  
 240  
 ccccatgcac tgcccagtc ccagacccca aagactttgt cctcgctca cgcacctttt  
 300  
 gcaggctcac actgtctgtg tgcgcaagag gtagcgacag gagacaatgg ggaaagagct  
 360  
 gaaggaggca aacaaggcca gggggaaagc ctacctcgag gcacagaggg gccccaagat  
 420  
 ggatat  
 426

<210> 1712  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 1712  
 Met Asn Arg Glu Ser Arg Gly Asn Thr Cys Arg Lys Tyr Phe Leu Gln

```

      1             5             10             15
Leu Pro Gln Tyr Asn Ser Val Met Phe Ile Pro Gly Glu Lys Ser Val
      20             25             30
Arg Thr His Ser Ile Ser Gln Ala Glu Ala Val Val Ser Gly Gly
      35             40             45
Leu Gly Ser Phe Ser Pro Lys Tyr Pro Pro His Ala Leu Pro Ser Pro
      50             55             60
Gln Thr Pro Lys Thr Leu Ser Ser Pro His Ala Pro Phe Ala Gly Ser
      65             70             75             80
His Cys Leu Cys Ala Gln Glu Val Ala Thr Gly Asp Asn Gly Glu Arg
      85             90             95
Ala Glu Gly Gly Lys Gln Gly Gln Gly Glu Ser Leu Pro Arg Gly Thr
      100             105             110
Glu Gly Pro Gln Asp Gly Tyr
      115

```

&lt;210&gt; 1713

&lt;211&gt; 328

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1713

```

tctagaaagg tttatttcat gggccaaggc ttgtgtttcc aaagccagga agggctgaag
60
ccagaattgg ccttggtctgc ttgccacaga gtctggccgg gggaccctgg acctcagcag
120
ggtcattgat aggtcagctt tggaggagca gggccagcgt gtctctgttt ctgctcctgg
180
aatgagcctc actccctccc tgcctcaaggc agcccttcac ccagccgccc ggacaggtgc
240
cctgtgccac ctgccatccc tgggattctc catctcagtg agtgctccct ggggcctggg
300
aacgcattct gctgggtgact cctggggg
328

```

&lt;210&gt; 1714

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1714

```

Met Gly Gln Gly Leu Cys Phe Gln Ser Gln Glu Gly Leu Lys Pro Glu
  1             5             10             15
Leu Ala Leu Ala Ala Cys His Arg Val Trp Pro Gly Asp Pro Gly Pro
      20             25             30
Gln Gln Gly His Asp Glu Val Ser Phe Gly Gly Ala Gly Pro Ala Cys
      35             40             45
Pro Ala Phe Cys Ser Trp Asn Glu Pro His Ser Leu Pro Ala Gln Gly
      50             55             60
Ser Pro Ser Pro Ser Arg Arg Asp Arg Cys Pro Val Pro Pro Ala Ile
      65             70             75             80
Pro Gly Ile Leu His Leu Ser Glu Cys Ser Leu Gly Pro Gly Asn Ala
      85             90             95
Ser Gly Trp

```

<210> 1715  
 <211> 489  
 <212> DNA  
 <213> Homo sapiens

<400> 1715  
 gttgccagcg atggggccgca tttgtacatc ccggtatttc gtgttcggtg tgggtgtaaaa  
 60  
 gatgccccat gtgtgacatt ctgtggatag ttattgttag cattatttga caagttctag  
 120  
 aaatc gatcc acccaggcgt gtagctgcgg tatttcatca gagttgatcg ttgcgatgag  
 180  
 ttgatcatgg cctgtcatgg cgtagtcttc tacgtcgtaa agtatgagac aatccacggt  
 240  
 aatatggtgt tttttggcca actcgggaagc cggggtgtcg gggaagtcgg tccctgtaag  
 300  
 gtatgggcct gtcccaatga cgacgtgtgc tgggtccatg aggagttcgt ccaaggttcg  
 360  
 aactcattac cgtcgaatac gacgctgtcg ccatcggcgg tgtcgaatcg aatcctcaaa  
 420  
 gtgtatccgt actcgggtgc gcgcaacagg tgcctaacct cagcgctagt gggctgtgca  
 480  
 ctgacgcgt  
 489

<210> 1716  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

<400> 1716  
 Met Ala Cys His Gly Val Val Phe Tyr Val Val Lys Tyr Glu Thr Ile  
 1 5 10 15  
 His Gly Asn Met Val Phe Phe Gly Gln Leu Gly Ser Arg Gly Val Gly  
 20 25 30  
 Glu Val Gly Pro Cys Lys Val Trp Ala Cys Pro Asn Asp Asp Val Cys  
 35 40 45  
 Trp Val His Glu Glu Phe Val Gln Gly Ser Asn Ser Leu Pro Ser Asn  
 50 55 60  
 Thr Thr Leu Ser Pro Ser Ala Val Ser Asn Arg Ile Leu Lys Val Tyr  
 65 70 75 80  
 Pro Tyr Ser Val Ser Arg Asn Arg Cys Leu Thr Ser Ala Leu Val Gly  
 85 90 95  
 Cys Ala Leu Thr Arg  
 100

<210> 1717  
 <211> 312  
 <212> DNA  
 <213> Homo sapiens

<400> 1717



nggcatacaa cggagtaaaa accacatcaa cagaagtgga aacaggccca gagagcgtga  
 60  
 gaggtttctg gtttcaagaa ggcacactga gtccctgcac ccgatgcctc tccttcccca  
 120  
 aatcccactg gaatacacag agagacataa aaacaaggag tgtcctgtag cagagcagcc  
 180  
 aggctggctc atgagacaga gggagcagtc ttctgggaga catggctctt gctgctgcgg  
 240  
 atcagccaac agatccatgg aaagcaaagg gcccttctcc ggaggcttcc tggggcctgc  
 300  
 catgaatgtg tc  
 312

<210> 1718

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1718

Met	Ala	Gly	Pro	Arg	Lys	Pro	Pro	Glu	Lys	Gly	Pro	Leu	Leu	Ser	Met
1				5					10					15	
Asp	Leu	Leu	Ala	Asp	Pro	Gln	Gln	Gln	Glu	Pro	Cys	Leu	Pro	Glu	Asp
			20					25					30		
Cys	Ser	Leu	Cys	Leu	Met	Ser	Gln	Pro	Gly	Cys	Ser	Ala	Thr	Gly	His
		35					40					45			
Ser	Leu	Phe	Leu	Cys	Leu	Ser	Val	Tyr	Ser	Ser	Gly	Ile	Trp	Gly	Arg
	50					55					60				
Arg	Gly	Ile	Gly	Cys	Arg	Asp	Ser	Val	Cys	Leu	Leu	Glu	Thr	Arg	Asn
65					70				75					80	
Leu	Ser	Arg	Ser	Leu	Gly	Leu	Phe	Pro	Leu	Leu	Leu	Met	Trp	Phe	Leu
				85				90						95	
Leu	Arg	Cys	Met	Pro											
			100												

<210> 1719

<211> 404

<212> DNA

<213> Homo sapiens

<400> 1719

tgatcaccac ggccctgccca ttttttgtcg ggaccgcaga ccgtatgctg cccctcgaag  
 60  
 tcagagacaa tccaaccggc ctgcaaaact gcggtcttgc ccggggcaac gtcgtagggg  
 120  
 ccaacagttt ctccaacctc ataggtagaa gaagtgtat agctgctgga aatggagatg  
 180  
 tggatcacat cgagcagtgg gaagtcaatg cctgccgaaa ccgaccagtt cttcgtctta  
 240  
 gtttctgtga tggatcgctg gaccggctgc ggagtgtcgt tgagttggaa atcgtcacgt  
 300  
 cccagcagag ccatcgaagt agctgcgcac cacatgaacg ggctgtccgt gtcaccggga  
 360  
 ttcgagcagg gagcacccat tggtngtgg tgtccccggg gggt  
 404

<210> 1720  
 <211> 126  
 <212> PRT  
 <213> Homo sapiens

<400> 1720  
 Met Gly Ala Pro Cys Ser Asn Pro Gly Asp Thr Asp Ser Pro Phe Met  
 1 5 10 15  
 Trp Cys Ala Ala Thr Ser Met Ala Leu Leu Gly Arg Asp Asp Phe Gln  
 20 25 30  
 Leu Asn Asp Thr Pro Gln Pro Val Thr Arg Ser Ile Thr Glu Thr Lys  
 35 40 45  
 Thr Lys Asn Trp Ser Val Ser Ala Gly Ile Asp Phe Pro Leu Leu Asp  
 50 55 60  
 Val Ile His Ile Ser Ile Ser Ser Ser Tyr Ser Thr Ser Ser Thr Tyr  
 65 70 75 80  
 Glu Val Gly Glu Thr Val Gly Pro Tyr Asp Val Ala Pro Gly Lys Thr  
 85 90 95  
 Ala Val Leu Gln Ala Gly Trp Ile Val Ser Asp Phe Glu Gly Gln His  
 100 105 110  
 Thr Val Cys Gly Pro Asp Lys Lys Trp Gln Gly Arg Gly Asp  
 115 120 125

<210> 1721  
 <211> 529  
 <212> DNA  
 <213> Homo sapiens

<400> 1721  
 ccattggccac cctttcagga cagagctgcc cttcccatgc tggaggagcc acagggcctg  
 60  
 gtcgctgtgg cttcagcctc ccagctcctc ctgtcctctg ctgggcactt gtaatgtcca  
 120  
 ggcactccct gcttggatca ggggatctgg gtttcatctt ccagctcct cctgtcctct  
 180  
 gctgggcacc tgtgatgtcc aggcactccc tgcttggatt gggggatctg ggtttcatct  
 240  
 tcccagctcc tctgtcctc cgtggggcac ctgtgatgtc caggcactcc ctgcttggat  
 300  
 cgggggggtct gggttttgtg ctatacttgg tgctcccttt cactcaggcc ccttcttgac  
 360  
 tctgcagagc taccctcgc catctctttc acgcgggcct cctgcagtct ctgtgtcac  
 420  
 cctgtgactc tgcttccggt gttgtcaa at ggggggtcatc ccaggaccgg caccactggg  
 480  
 tcgtgtgcag gtttctgggg tggcagagtg cggatgagtg ggcaacggt  
 529

<210> 1722  
 <211> 118  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 1722

```

Met Ala Thr Leu Ser Gly Gln Ser Cys Pro Ser His Ala Gly Gly Ala
 1           5           10           15
Thr Gly Pro Gly Arg Cys Gly Phe Ser Leu Pro Ala Pro Pro Val Leu
          20           25           30
Cys Trp Ala Leu Val Met Ser Arg His Ser Leu Leu Gly Ser Gly Asp
          35           40           45
Leu Gly Phe Ile Phe Pro Ala Pro Pro Val Leu Cys Trp Ala Pro Val
          50           55           60
Met Ser Arg His Ser Leu Gly Leu Gly Asp Leu Gly Phe Ile Phe
65           70           75           80
Pro Ala Pro Pro Val Leu Arg Trp Ala Pro Val Met Ser Arg His Ser
          85           90           95
Leu Leu Gly Ser Gly Gly Leu Gly Phe Val Leu Tyr Leu Val Leu Pro
          100          105          110
Phe Thr Gln Ala Pro Ser
          115

```

&lt;210&gt; 1723

&lt;211&gt; 371

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1723

```

acgcgtttga agctggatgc atggatatcc agcgccgccca tcgggtcaaa tgggttgacg
60
ctgcccttga tggtcaccgg ggcgtagcga tctacettac cgttgatgtc gacgctcgcc
120
ggtttggcct ggcggctgtc aatggtgccca atcttcccg ttagttgttg aatggcagtg
180
gcaaagttgg gcgtgaggct gaagtcggcg aagttggcgg agccatcatt gatcgcaacc
240
tgcccaatgt gaatgccagc tggcttctct ttgctggcgg ccggctgtct tgttgccagt
300
gtcgggccggg tgcgggatca gcaagtcac gatgttggtg gggcggtcat cggtgatcgc
360
tgcattcaat a
371

```

&lt;210&gt; 1724

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1724

```

Met Asp Ile Gln Arg Arg His Arg Val Lys Trp Val Asp Ala Ala Leu
 1           5           10           15
Asp Gly His Arg Gly Val Ala Ile Tyr Leu Thr Val Asp Val Asp Ala
          20           25           30
Arg Arg Phe Gly Leu Ala Ala Val Asn Gly Ala Asn Leu Pro Val Glu
          35           40           45
Leu Leu Asn Gly Ser Gly Lys Val Gly Arg Glu Ala Glu Val Gly Glu
          50           55           60
Val Gly Arg Ala Ile Ile Asp Arg Asn Leu Pro Asn Val Asn Ala Gln

```

65		70		75		80									
Trp	Leu	Leu	Phe	Ala	Gly	Arg	Arg	Leu	Ser	Cys	Cys	Gln	Cys	Arg	Pro
			85					90						95	
Gly	Ala	Gly	Ser	Ala	Ser	His	Arg	Cys	Trp	Trp	Gly	Gly	His	Arg	
			100					105					110		

&lt;210&gt; 1725

&lt;211&gt; 807

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1725

```

ngtgcacctg gtatggtgcc ctctgggtct aagcctgtcc ttgtacacac tcacactttg
60
atttgaagtg acctcttccc tctgagcctt ctggtgtcca actctcccct tctctaggac
120
catgcagtgc tggaggccga gaggcagaag atgtcagccc ttgtgcgagg gctgcagagg
180
gagctggagg agacttcaga ggagacaggg cattggcaga gtatgttcca gaagaacaag
240
gaggatctta gagccaccaa gcaggaactc ctgcagctgc gaatggagaa ggaggagatg
300
gaagaggagc ttggagagaa gatagaggtc ttgcagaggg aattagagca ggcccagact
360
agtgctggag atactcgcca ggttgaggtg ctcaagaagg agctgctccg gacacaggag
420
gagcttaagg aactgcaggc agaacggcag agccaggagg tggctgggcg acaccgggac
480
cgggagttgg agaagcagct ggcggtcctg agggtcgagg ctgatcgagg tcgggagctg
540
gaagaacaga acctccagct acaaaagacc ctccagcaat tgcgacagga ctgtgaagag
600
gcttccaagg ctaagatggt ggccgaggca gaggcaacag tgctggggca gcggcgggcc
660
gcagtggaga cgacgcttcg ggagaccag gaggaaaatg acgaattccg ccggcgcatc
720
ctgggttttg agcagcagct gaaggagact cgaggtctgg tggatggtgg ggaagcggtg
780
gaggcacgac tacgggacaa gctgcag
807

```

&lt;210&gt; 1726

&lt;211&gt; 230

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1726

Asp	His	Ala	Val	Leu	Glu	Ala	Glu	Arg	Gln	Lys	Met	Ser	Ala	Leu	Val
1				5				10						15	
Arg	Gly	Leu	Gln	Arg	Glu	Leu	Glu	Glu	Thr	Ser	Glu	Glu	Thr	Gly	His
			20					25					30		
Trp	Gln	Ser	Met	Phe	Gln	Lys	Asn	Lys	Glu	Asp	Leu	Arg	Ala	Thr	Lys
			35				40					45			
Gln	Glu	Leu	Leu	Gln	Leu	Arg	Met	Glu	Lys	Glu	Glu	Met	Glu	Glu	Glu

50	55	60
Leu Gly Glu Lys Ile Glu Val Leu Gln Arg Glu Leu Glu Gln Ala Arg		
65	70	75
Ala Ser Ala Gly Asp Thr Arg Gln Val Glu Val Leu Lys Lys Glu Leu		80
	85	90
Leu Arg Thr Gln Glu Glu Leu Lys Glu Leu Gln Ala Glu Arg Gln Ser		95
	100	105
Gln Glu Val Ala Gly Arg His Arg Asp Arg Glu Leu Glu Lys Gln Leu		110
	115	120
Ala Val Leu Arg Val Glu Ala Asp Arg Gly Arg Glu Leu Glu Glu Gln		125
	130	135
Asn Leu Gln Leu Gln Lys Thr Leu Gln Gln Leu Arg Gln Asp Cys Glu		140
145	150	155
Glu Ala Ser Lys Ala Lys Met Val Ala Glu Ala Glu Ala Thr Val Leu		160
	165	170
Gly Gln Arg Arg Ala Ala Val Glu Thr Leu Arg Glu Thr Gln Glu		175
	180	185
Glu Asn Asp Glu Phe Arg Arg Arg Ile Leu Gly Leu Glu Gln Gln Leu		190
	195	200
Lys Glu Thr Arg Gly Leu Val Asp Gly Gly Glu Ala Val Glu Ala Arg		205
	210	215
Leu Arg Asp Lys Leu Gln		220
225	230	

&lt;210&gt; 1727

&lt;211&gt; 474

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1727

```

aaccaactct ccacaacatc gccagaaaca gtcgctgcc aagggtcca ccatgtttta
60
gcagcttcag aagacaaaga taagatgaaa aaggaagttt tacaaagctc aagggacatt
120
atgcaatcca aatcagcttg cgaaattaaa caaagtcacc aagaatgtag tacccaacaa
180
acacaacaga agaagtatct ggagcagttg cacttgcccc aaagcaaacc aatttcccc
240
aatttcaaag ttaaaaccat caaacttcca actctagatc atacattaaa tgaaacagac
300
cacagctatg aaagtcataa acagcaatct gagattgatg ttcaaacctt taccaaaaaa
360
caatatctga aaaccaagaa aactgaagca agcactgaat gtagtcataa gcaatctctg
420
gctgaaagac attatcagtt acctaagaag gagaaaagag tgacagtaca attg
474

```

&lt;210&gt; 1728

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1728

Met Lys Lys Glu Val Leu Gln Ser Ser Arg Asp Ile Met Gln Ser Lys

```

      1             5             10             15
Ser Ala Cys Glu Ile Lys Gln Ser His Gln Glu Cys Ser Thr Gln Gln
      20             25             30
Thr Gln Gln Lys Lys Tyr Leu Glu Gln Leu His Leu Pro Gln Ser Lys
      35             40             45
Pro Ile Ser Pro Asn Phe Lys Val Lys Thr Ile Lys Leu Pro Thr Leu
      50             55             60
Asp His Thr Leu Asn Glu Thr Asp His Ser Tyr Glu Ser His Lys Gln
      65             70             75             80
Gln Ser Glu Ile Asp Val Gln Thr Phe Thr Lys Lys Gln Tyr Leu Lys
      85             90             95
Thr Lys Lys Thr Glu Ala Ser Thr Glu Cys Ser His Lys Gln Ser Leu
      100            105            110
Ala Glu Arg His Tyr Gln Leu Pro Lys Lys Glu Lys Arg Val Thr Val
      115            120            125
Gln Leu
      130

```

&lt;210&gt; 1729

&lt;211&gt; 470

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1729

```

acgcgtgact cgccataaca ttgctgacac gttttccacg gcaagggagg catcatgacg
60
aggatcgacg tgtggctgtg gtcggtgcgc gtctataagt cccggtcggt ggctaccgcc
120
gccgtcaagg ggggccacat tcgcctcaat ggagaccggt ttaaaccctc ccacgacgtg
180
aaaccgggcg ataccgtcac catccacacc ccgggatggg accgggtcct caaggtcac
240
aaccgatca cgaaaagagt cggcgccaaa ctgcgggtcg aggcttacga agatctgtca
300
nngccccccg acccgctac ctctctgnct cccctcgccc gccgcgaccg tggggctgga
360
cgaccacca agaaggatcg tcgcgagatc gatcggctcc gaggcgggga ctctcgctat
420
tgaggactct tcgcccggcc caacacacca cggctcgcgg ccgaattggc
470

```

&lt;210&gt; 1730

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1730

```

His Val Phe His Gly Lys Gly Gly Ile Met Thr Arg Ile Asp Val Trp
      1             5             10             15
Leu Trp Ser Val Arg Val Tyr Lys Ser Arg Ser Leu Ala Thr Ala Ala
      20             25             30
Val Lys Gly Gly His Ile Arg Leu Asn Gly Asp Pro Val Lys Pro Ser
      35             40             45
His Asp Val Lys Pro Gly Asp Thr Val Thr Ile His Thr Pro Gly Trp

```

```

      50              55              60
Asp Arg Val Leu Lys Val Ile Asn Pro Ile Thr Lys Arg Val Gly Ala
65              70              75              80
Lys Leu Ala Val Glu Ala Tyr Glu Asp Leu Ser Xaa Pro Pro Asp Pro
      85              90              95
Pro Thr Ser Leu Xaa Pro Leu Ala Arg Arg Asp Arg Gly Ala Gly Arg
      100              105              110
Pro Thr Lys Lys Asp Arg Arg Glu Ile Asp Arg Leu Arg Gly Arg Asp
      115              120              125
Ser Arg Tyr
      130

```

&lt;210&gt; 1731

&lt;211&gt; 534

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1731

```

agcgtccct gcctgctgct gggcggaggg aaggcggcaa gagctgcgga gccctggaa
60
gagcttccag gaaccctgcg ctgtgggata aaggaatgag gttcagaaag gggcagggag
120
ttgcccgcag ccgcaccgca cgtcttcagc ccgaccgttg tcctgacctc tctgtcccgt
180
cccctgcccc gtctcaccat ggccttctgg acacagctga tgctgctgct ctggaagaat
240
ttcatgtatc gccggagaca gccggtccag ctcttggtcg aattgctgtg gcctctcttc
300
ctcttcttca tcctggtggc tgttcgccac tcccaccgc ccctggagca ccatgaatgc
360
cacttcccaa acaagccact gccatcggcg ggcaccgtgc cctggctcca gggctctatc
420
tgtaatgtga acaacacctg ctttccgcag ctgacaccgg gcgaggagcc cgggcgcctg
480
agcaacttca acgactccct ggtctcccgg ctgctacgtc ggagagaggc tgga
534

```

&lt;210&gt; 1732

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1732

```

Met Ala Phe Trp Thr Gln Leu Met Leu Leu Leu Trp Lys Asn Phe Met
1              5              10              15
Tyr Arg Arg Arg Gln Pro Val Gln Leu Leu Val Glu Leu Leu Trp Pro
      20              25              30
Leu Phe Leu Phe Phe Ile Leu Val Ala Val Arg His Ser His Pro Pro
      35              40              45
Leu Glu His His Glu Cys His Phe Pro Asn Lys Pro Leu Pro Ser Ala
      50              55              60
Gly Thr Val Pro Trp Leu Gln Gly Leu Ile Cys Asn Val Asn Asn Thr
65              70              75              80
Cys Phe Pro Gln Leu Thr Pro Gly Glu Glu Pro Gly Arg Leu Ser Asn

```

	85		90		95										
Phe	Asn	Asp	Ser	Leu	Val	Ser	Arg	Leu	Leu	Arg	Arg	Arg	Glu	Ala	Gly
	100			105									110		

<210> 1733  
 <211> 409  
 <212> DNA  
 <213> Homo sapiens

<400> 1733  
 acgcgtgatg gccgatccga ctgtgcccg tcacgaccg cggcgccga gtccctgaccc  
 60  
 ggacatgccg tggctgatcc ggcacatcac cctcggcaac aacgtgatcg cgggcagcac  
 120  
 gggcaactgc accctctgcg tcgaggacta ctgcgcagg tacgcggcga ggatcctcaa  
 180  
 catcgtctcc gacggcaacg tcctgcagcg cgcacggcc gcacagccag cgtggctggt  
 240  
 tgggtgtggtc gcggggatca ggaactccg atccgtacgt attctccagc ctgcagcgtt  
 300  
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<210> 1734  
 <211> 134  
 <212> PRT  
 <213> Homo sapiens

<400> 1734  
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 Val Ile Ala Gly Ser Thr Gly Asn Cys Thr Leu Cys Val Glu Asp Tyr  
 35 40 45  
 Ser Arg Arg Tyr Ala Ala Arg Ile Leu Asn Ile Val Ser Asp Gly Asn  
 50 55 60  
 Val Leu Gln Arg Ala Ser Ala Ala Gln Pro Ala Trp Leu Val Gly Val  
 65 70 75 80  
 Val Ala Gly Ile Ser Glu Leu Arg Ser Val Arg Ile Leu Gln Pro Arg  
 85 90 95  
 Arg Leu Pro Gly Asp His Trp Phe Leu Gly Pro Ser Leu Gly Leu Asp  
 100 105 110  
 Arg Trp Arg Ala Val Thr Ala Ala Gly Ala Leu Leu Pro Gly Ile Asp  
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 Leu Lys Ala Val Thr Arg  
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<210> 1735  
 <211> 342  
 <212> DNA  
 <213> Homo sapiens



&lt;400&gt; 1735

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 cgtcaggcac caggaaacgt accgacttcc cgctggccgg cagttgacgg atctgggtgg  
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 240  
 ccaaggggtc acttaccgac cgcgcggcca gcaggttgcg caaggcatcc ggcggttcgc  
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 342

&lt;210&gt; 1736

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1736

Met	Val	Ile	Ser	Ile	Met	Cys	Ser	Ala	Pro	Ala	Ala	Arg	Met	Phe	Val
1				5					10					15	
Arg	Ser	Ser	Ala	Pro	Phe	Ser	Ser	Thr	His	Gly	Lys	Ala	Arg	Ala	His
			20					25					30		
Arg	Cys	Arg	Pro	Gly	Pro	Arg	Gln	Ala	Pro	Gly	Asn	Val	Pro	Thr	Ser
		35				40						45			
Arg	Trp	Pro	Ala	Val	Asp	Gly	Ser	Gly	Trp	Arg	Thr	Pro	Gln	Ala	Gly
	50				55				60						
Ser	Ala	Arg	Arg	Met	Gln	Tyr	Ser	Arg	Ser	Ala	Arg	Ser	Gly	Pro	Arg
65				70				75					80		
Gly	His	Leu	Pro	Thr	Ala	Arg	Pro	Ala	Gly	Cys	Ala	Arg	His	Pro	Ala
			85					90					95		
Val	Arg	Trp	Arg	His	Pro	Gly	Val	Ala	Lys	Pro	Gly	Cys	Gly	Asn	Ala
			100					105					110		

&lt;210&gt; 1737

&lt;211&gt; 506

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1737

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 ccgacctata agtctcccag acacttttac gaccggccct ccccttggg gtgggccccg  
 300  
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 360

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 506

<210> 1738  
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 <213> Homo sapiens

<400> 1738  
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 Val Val Leu Pro Gly Ala Ser His Asp Thr Lys Arg Thr Gly Pro Thr  
 35 40 45  
 Pro Arg Gly Arg Ala Gly Arg Lys Ser Val Trp Glu Thr Tyr Arg Ser  
 50 55 60  
 Val Leu Lys Thr Leu Glu Gly Leu Ala Gln Gly Asp Arg Asp Leu Arg  
 65 70 75 80  
 Arg Gly Thr Ala Leu Val Glu Val Gln Pro Arg His Pro Val Ala Trp  
 85 90 95  
 Val Gly Gly Asp Val Gly Ala Gly Arg Leu His Val Val Pro Val Gly  
 100 105 110  
 Arg

<210> 1739  
 <211> 420  
 <212> DNA  
 <213> Homo sapiens

<400> 1739  
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 120  
 gagtctgggc cattgggttag cacgtttaat tcaatagagg actattatca aacccatggt  
 180  
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 240  
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 300  
 gctattgatt ctttgcgaaa aatgaaaacg atgatcagtg ctgaagttcg tcgcaagggg  
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 420

<210> 1740  
 <211> 140  
 <212> PRT

<213> Homo sapiens

<400> 1740

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Arg Val Ile Glu Asn Ala Ala Phe Phe Thr Lys Leu Gly Gln Arg Leu
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Ile Gly Ala Leu His Gln Val Thr Val Asp Gly Phe Val Tyr Arg Val
      20           25           30
Asp Met Arg Leu Arg Pro Phe Gly Glu Ser Gly Pro Leu Val Ser Thr
      35           40           45
Phe Asn Ser Ile Glu Asp Tyr Tyr Gln Thr His Gly Arg Glu Trp Glu
      50           55           60
Cys Tyr Ala Met Val Lys Ala Arg Val Ile Gly Val Glu Asp Glu Tyr
      65           70           75           80
Lys Gln Ala Leu Glu Arg Met Leu Arg Pro Phe Val Phe Arg Arg Tyr
      85           90           95
Ile Asp Phe Ser Ala Ile Asp Ser Leu Arg Lys Met Lys Thr Met Ile
      100          105          110
Ser Ala Glu Val Arg Arg Lys Gly Leu Lys Asp Asn Ile Lys Leu Gly
      115          120          125
Met Gly Gly Ile Arg Glu Ile Glu Phe Val Ala Gln
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<210> 1741

<211> 378

<212> DNA

<213> Homo sapiens

<400> 1741

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378

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<210> 1742

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1742

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Xaa Arg Val Glu Val Ile Gln Ala Asp Ala Thr Asp Pro Leu Val Leu
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His Ser Leu Asn Gly Gln Val Asp Val Val Val Ser Asn Pro Pro Tyr
      20           25           30
Val Pro Ala Gly Ala Val Glu Asp Thr Glu Thr Ala Gln His Glu Pro

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35                      40                      45  
 Thr Val Ala Leu Tyr Gly Gly Gly Pro Asp Gly  
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<210> 1743  
 <211> 4121  
 <212> DNA  
 <213> Homo sapiens

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 360  
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 aacacatacc atgtgtacca taacaccgag gacctgtggg gggagcccca tgctgtggcc  
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<210> 1744

<211> 796

<212> PRT

<213> Homo sapiens

<400> 1744

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			20					25					30		
Tyr	Leu	Val	Gln	Gly	Arg	Tyr	Phe	Leu	Val	Arg	Asp	Val	Thr	Glu	Lys
		35					40				45				
Met	Asp	Val	Leu	Gly	Thr	Val	Gly	Ser	Cys	Gly	Ala	Pro	Asn	Phe	Arg

50		55		60												
Gln	Val	Gln	Gly	Gly	Leu	Thr	Val	Phe	Gly	Met	Gly	Gln	Pro	Ser	Leu	
65					70					75					80	
Ser	Gly	Phe	Arg	Arg	Val	Leu	Gln	Lys	Leu	Gln	Lys	Asp	Gly	His	Arg	
				85					90					95		
Glu	Cys	Val	Ile	Phe	Cys	Val	Arg	Glu	Glu	Pro	Val	Leu	Phe	Leu	Arg	
			100					105					110			
Ala	Asp	Glu	Asp	Phe	Val	Ser	Tyr	Thr	Pro	Arg	Asp	Lys	Gln	Asn	Leu	
		115					120					125				
His	Glu	Asn	Leu	Gln	Gly	Leu	Gly	Pro	Gly	Val	Arg	Val	Glu	Ser	Leu	
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Glu	Leu	Ala	Ile	Arg	Lys	Glu	Ile	His	Asp	Phe	Ala	Gln	Leu	Ser	Glu	
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Asn	Thr	Tyr	His	Val	Tyr	His	Asn	Thr	Glu	Asp	Leu	Trp	Gly	Glu	Pro	
				165					170					175		
His	Ala	Val	Ala	Ile	His	Gly	Glu	Asp	Asp	Leu	His	Val	Thr	Glu	Glu	
		180						185					190			
Val	Tyr	Lys	Arg	Pro	Leu	Phe	Leu	Gln	Pro	Thr	Tyr	Arg	Tyr	His	Arg	
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Leu	Pro	Leu	Pro	Glu	Gln	Gly	Ser	Pro	Leu	Glu	Ala	Gln	Leu	Asp	Ala	
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Phe	Val	Ser	Val	Leu	Arg	Glu	Thr	Pro	Ser	Leu	Leu	Gln	Leu	Arg	Asp	
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Ala	His	Gly	Pro	Pro	Pro	Ala	Leu	Val	Phe	Ser	Cys	Gln	Met	Gly	Val	
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		260					265					270				
Arg	Ser	Gly	Thr	Thr	Ser	Gln	Pro	Glu	Ala	Ala	Pro	Thr	Gln	Ala	Lys	
	275					280						285				
Pro	Leu	Pro	Met	Glu	Gln	Phe	Gln	Val	Ile	Gln	Ser	Phe	Leu	Arg	Met	
	290				295						300					
Val	Pro	Gln	Gly	Arg	Arg	Met	Val	Glu	Glu	Val	Asp	Arg	Ala	Ile	Thr	
305				310						315					320	
Ala	Cys	Ala	Glu	Leu	His	Asp	Leu	Lys	Glu	Val	Val	Leu	Glu	Asn	Gln	
			325						330					335		
Lys	Lys	Leu	Glu	Gly	Ile	Arg	Pro	Glu	Ser	Pro	Ala	Gln	Gly	Ser	Gly	
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Ser	Arg	His	Ser	Val	Trp	Gln	Arg	Ala	Leu	Trp	Ser	Leu	Glu	Arg	Tyr	
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Phe	Tyr	Leu	Ile	Leu	Phe	Asn	Tyr	Tyr	Leu	His	Glu	Gln	Tyr	Pro	Leu	
	370				375					380						
Ala	Phe	Ala	Leu	Ser	Phe	Ser	Arg	Trp	Leu	Cys	Ala	His	Pro	Glu	Leu	
385				390					395						400	
Tyr	Arg	Leu	Pro	Val	Thr	Leu	Ser	Ser	Ala	Gly	Pro	Val	Ala	Pro	Arg	
			405						410					415		
Asp	Leu	Ile	Ala	Arg	Gly	Ser	Leu	Arg	Glu	Asp	Asp	Leu	Val	Ser	Pro	
		420						425					430			
Asp	Ala	Leu	Ser	Thr	Val	Arg	Glu	Met	Asp	Val	Ala	Asn	Phe	Arg	Arg	
	435					440						445				
Val	Pro	Arg	Met	Pro	Ile	Tyr	Gly	Thr	Ala	Gln	Pro	Ser	Ala	Lys	Ala	
	450				455					460						
Leu	Gly	Ser	Ile	Leu	Ala	Tyr	Leu	Thr	Asp	Ala	Lys	Arg	Arg	Leu	Arg	
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<210> 1745
<211> 426
<212> DNA
<213> Homo sapiens
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1376



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<210> 1746  
 <211> 142  
 <212> PRT  
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 Asn Ala Thr Thr Ile Lys Ile Ala Thr Val Asn Arg Ser Gly Ser Glu  
 35 40 45  
 Glu Lys Arg Trp Asp Lys Ile Gln Glu Leu Val Lys Lys Asp Gly Ile  
 50 55 60  
 Thr Leu Glu Phe Thr Glu Phe Thr Gly Tyr Ser Gln Pro Asn Lys Ala  
 65 70 75 80  
 Thr Ala Asp Gly Glu Val Asp Leu Asn Ala Phe Gln His Tyr Asn Phe  
 85 90 95  
 Leu Asn Asn Trp Asn Lys Glu Asn Gly Lys Asp Leu Val Ala Ile Ala  
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 Asp Asn Lys Tyr Thr Lys Val Glu Ala Gly Val Cys Ser Arg  
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<210> 1747  
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 <212> DNA  
 <213> Homo sapiens

<400> 1747  
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<210> 1748  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 1748  
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                   20                  25                  30  
 Met Tyr Gln Tyr Glu Pro His Ala Asp Gly His Gly Leu Trp Gly His  
           35                  40                  45  
 Val Thr Ser Pro Asn Phe Ser Pro Phe Asn Trp Thr Asp Gly Glu Asp  
   50                  55                  60  
 Ile Leu Val Pro Glu Gly Glu Glu Thr Asp Leu Trp Ala Gly Ser Val  
 65                  70                  75                  80  
 Ile Ser Asn Ala Gly Lys Val Thr Leu Phe Phe Thr Ser Val Lys Gly  
                   85                  90                  95  
 Asp Xaa Asp Gly Asn Pro Ser Gly Arg Cys Arg Arg Arg Gln Ser Tyr  
           100                  105                  110  
 Ala

<210> 1749  
 <211> 853  
 <212> DNA  
 <213> Homo sapiens

<400> 1749  
 cccagcagggc aaagagagag gcctccctgg ctctcgagtgt caggggagcc gcgttccttc  
 60  
 ccagggctgg agcagaggac cacaaggcag cagaaagcgc ggggccagat gagggccagg  
 120  
 aaggggagga gaggtagggc caagaacgag ccttaaggga gcagtcccaa gctggagcca  
 180  
 cccagggctg ggtctgggag tcctcagtgt ccacttgctc cagggttaggg ggcttgccctt  
 240  
 gctctctcca gggccagtct ctgtgtgtgg ggactcagcc cgtggccggc agatgccatc  
 300  
 caggatgtac aaggtgcagc caaggcaggc catgcagggg ccgggcctgt ctgcagctgg  
 360  
 tggatgcctg tgggcatggc tttctctggg gaccccatc ctgtcagtag caaccctggc  
 420  
 agtgtccgga gcggctctag acaactttgg tcataggaac tctggaggtg ggttctggtc  
 480  
 atctgaggtg gctactcaac aggtttgagg cccacagca acagaagtcc aggaccact  
 540  
 aggttgccctc agaagcccta agactgatga gctggagcgc gcatttgaga gaagcctcgc  
 600  
 acccactgtg tactggcccc gctcaggccg gcctggcaca ccgttgccctg ctggcggctc  
 660  
 tcatggggaa gcgcctgggc actggggatt gcttgtgggc cactcaactc ttggggcagt  
 720

ggccgtaacc ctagtttgcc tgaggccctt atgtcccctt atgttcctgg tactggagct  
 780  
 tgagctcttg cctggcacgc tgcagctgca cccaccctgc ttgatccac ctgggaggcc  
 840  
 aggacactga gga  
 853

<210> 1750  
 <211> 64  
 <212> PRT  
 <213> Homo sapiens

<400> 1750  
 Glu Lys Pro Arg Thr His Cys Val Leu Ala Pro Leu Arg Pro Ala Trp  
 1 5 10 15  
 His Thr Val Ala Cys Trp Arg Leu Ser Trp Gly Ser Ala Trp Ala Leu  
 20 25 30  
 Gly Ile Ala Cys Gly Pro Leu Asn Ser Trp Gly Ser Gly Arg Asn Pro  
 35 40 45  
 Ser Leu Pro Glu Ala Leu Met Ser Pro Tyr Val Pro Gly Thr Gly Ala  
 50 55 60

<210> 1751  
 <211> 531  
 <212> DNA  
 <213> Homo sapiens

<400> 1751  
 ggccgcatcc cgcattctggg ccgatggcga atgggcaatt tcagtcgcag acagggacat  
 60  
 gacgatgccg ttgtcgagaa ggccatggcg acgaccgggg tctccgagct tactgatagg  
 120  
 gcatggtctt ccctgtcagg aggagagagg caacgggtac agctggctcg tgccttggca  
 180  
 caggagcccc agatcttatt tcttgacgag ccgacaaatc accttgactt gccacaccag  
 240  
 atcgacctcc tggagcgggt ccgaggactc ggcttgacga cggtcaccgt cattcatgac  
 300  
 ctgacttgg ctgccgcta cgccgacgac ctcatcgtgc tcgactcggg tcgcatggtt  
 360  
 gctggcggac cggcgagcac agtgctgacg cctggccttg tccgtgacca ctttggtgtc  
 420  
 gacggtgagg tttggtcctc ctcgaggcgc ggcttcacct ggaacgggct gcagacatga  
 480  
 cgacgcgtat cgcagtatcc ctccgatggg acgacgccat tgacttgagc c  
 531

<210> 1752  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 1752  
 Gly Arg Ile Pro His Leu Gly Arg Trp Arg Met Gly Asn Phe Ser Arg

1	5	10	15
Arg Gln Gly His Asp Asp Ala Val Val Glu Lys Ala Met Ala Thr Thr			
	20	25	30
Gly Val Ser Glu Leu Thr Asp Arg Ala Trp Ser Ser Leu Ser Gly Gly			
	35	40	45
Glu Arg Gln Arg Val Gln Leu Ala Arg Ala Leu Ala Gln Glu Pro Glu			
	50	55	60
Ile Leu Phe Leu Asp Glu Pro Thr Asn His Leu Asp Leu Pro His Gln			
65	70	75	80
Ile Asp Leu Leu Glu Arg Val Arg Gly Leu Gly Leu Thr Thr Val Thr			
	85	90	95
Val Ile His Asp Leu Asp Leu Ala Ala Ala Tyr Ala Asp Asp Leu Ile			
	100	105	110
Val Leu Asp Ser Gly Arg Met Val Ala Gly Gly Pro Ala Ser Thr Val			
	115	120	125
Leu Thr Pro Gly Leu Val Arg Asp His Phe Gly Val Asp Gly Glu Val			
	130	135	140
Trp Ser Ser Ser Arg Arg Gly Phe Thr Trp Asn Gly Leu Gln Thr			
145	150	155	

&lt;210&gt; 1753

&lt;211&gt; 920

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1753

gagacagtgg agaggctggg tcagtcccct gcccaggaca ccccggtcct ggggccttgc  
60  
tgggacccga tggtcttggg gactcagggc cgcttctgctgc tggacagggga ttccaaggac  
120  
acacagacca ggatcagcca aaagggccgc cgtctgcagc ccccggggac tccctcggcc  
180  
ccaccccaga gaaggcccg gaaacagctg aaccctgcc ggggcaccga gagagtggac  
240  
cctgggttcg agggggtgac tctgaagttt cagataaagc cggactccag cctgcagatc  
300  
atccccacgt acagcctgcc ctgcagtagc cgttctcagg aatcccctgc agatgctgtt  
360  
gggggcntg cagccatccc agagggcacc gagggccact cagcaggcag cgaggccctg  
420  
gagccccggc gctgtgcttc ctgtcggacc cagaggaccc cgctctggag agacgctgaa  
480  
gatgggaccc ttctctgcaa cgctgtggg atcaggtaca agaaatacgg cactcgtctgc  
540  
tccagctgct ggctggtgcc caggaaaaat gtccagcca agaggctatg tggcagatgt  
600  
ggagtgtccc tggaccccat tcaggaaggt taaaccagc ttaccctgc tgagctgctg  
660  
cttctgcttc cgtttcacca gtgggagaat gggcagaagc agctctccta ggaggattgg  
720  
ggaaagagcc ggcttgcctc ctctctgcca tctccagatt caaggatccc gggggaagac  
780  
ccaggcctca ggtggcagag cctgctaggg gtcaccagcc ccttctccag tcagccttgg  
840

ccgaggcccc ctcaggagac gctctcagga aggatgagca ttgttacagc agggacaata  
 900  
 aagtacagag atatgccgag  
 920

<210> 1754  
 <211> 210  
 <212> PRT  
 <213> Homo sapiens

<400> 1754  
 Glu Thr Val Glu Arg Leu Gly Gln Ser Pro Ala Gln Asp Thr Pro Val  
   1                  5                  10                  15  
 Leu Gly Pro Cys Trp Asp Pro Met Ala Leu Gly Thr Gln Gly Arg Leu  
           20                  25                  30  
 Leu Leu Asp Arg Asp Ser Lys Asp Thr Gln Thr Arg Ile Ser Gln Lys  
           35                  40                  45  
 Gly Arg Arg Leu Gln Pro Pro Gly Thr Pro Ser Ala Pro Pro Gln Arg  
           50                  55                  60  
 Arg Pro Arg Lys Gln Leu Asn Pro Cys Arg Gly Thr Glu Arg Val Asp  
 65                  70                  75                  80  
 Pro Gly Phe Glu Gly Val Thr Leu Lys Phe Gln Ile Lys Pro Asp Ser  
           85                  90                  95  
 Ser Leu Gln Ile Ile Pro Thr Tyr Ser Leu Pro Cys Ser Ser Arg Ser  
           100                  105                  110  
 Gln Glu Ser Pro Ala Asp Ala Val Gly Gly Xaa Ala Ala Ile Pro Glu  
           115                  120                  125  
 Gly Thr Glu Gly His Ser Ala Gly Ser Glu Ala Leu Glu Pro Arg Arg  
           130                  135                  140  
 Cys Ala Ser Cys Arg Thr Gln Arg Thr Pro Leu Trp Arg Asp Ala Glu  
 145                  150                  155                  160  
 Asp Gly Thr Leu Leu Cys Asn Ala Cys Gly Ile Arg Tyr Lys Lys Tyr  
           165                  170                  175  
 Gly Thr Arg Cys Ser Ser Cys Trp Leu Val Pro Arg Lys Asn Val Gln  
           180                  185                  190  
 Pro Lys Arg Leu Cys Gly Arg Cys Gly Val Ser Leu Asp Pro Ile Gln  
           195                  200                  205  
 Glu Gly  
   210

<210> 1755  
 <211> 437  
 <212> DNA  
 <213> Homo sapiens

<400> 1755  
 nnttctgcag agtagggaga cagtcttggg cctggatggc cattagtgct tggagtcag  
 60  
 ggagcaatca gaaatgatca aggagaatcc ttgatacgaa ctgcattcca gtgtcttcag  
 120  
 ttggttgtga cagattttct accaacaatg ccttgtactt gcctgcaaat agttgtagat  
 180  
 gttgcaggta gctttggcct ccataaccaa gaactcaata ttagtttaac ttcaatagg  
 240

ttattgtgga atatttcaga ttatTTTTTc caaagagggg aaactattga aaaagaacta  
 300  
 aataaggaag aggcagcaca gcaaaagcag gcagaagaga aaggagttgt tttaaatcgg  
 360  
 ccattccacc ctgcaccgcc atttgattgc ttgtggttat gtctttatgc aaaattgggt  
 420  
 gaactatgtg tggatcc  
 437

<210> 1756  
 <211> 126  
 <212> PRT  
 <213> Homo sapiens

<400> 1756  
 Met Gly Ala Ile Arg Asn Asp Gln Gly Glu Ser Leu Ile Arg Thr Ala  
 1 5 10 15  
 Phe Gln Cys Leu Gln Leu Val Val Thr Asp Phe Leu Pro Thr Met Pro  
 20 25 30  
 Cys Thr Cys Leu Gln Ile Val Val Asp Val Ala Gly Ser Phe Gly Leu  
 35 40 45  
 His Asn Gln Glu Leu Asn Ile Ser Leu Thr Ser Ile Gly Leu Leu Trp  
 50 55 60  
 Asn Ile Ser Asp Tyr Phe Phe Gln Arg Gly Glu Thr Ile Glu Lys Glu  
 65 70 75 80  
 Leu Asn Lys Glu Glu Ala Ala Gln Gln Lys Gln Ala Glu Glu Lys Gly  
 85 90 95  
 Val Val Leu Asn Arg Pro Phe His Pro Ala Pro Pro Phe Asp Cys Leu  
 100 105 110  
 Trp Leu Cys Leu Tyr Ala Lys Leu Gly Glu Leu Cys Val Asp  
 115 120 125

<210> 1757  
 <211> 1297  
 <212> DNA  
 <213> Homo sapiens

<400> 1757  
 nggatccgac ggaaatagaa ttgaaggcat tctaaaatgg ctaaccgtac agtgaaggat  
 60  
 gcgcacagca tccatggcac caaccctcaa tatctggtgg agaagatcat tcgaacgcga  
 120  
 atctatgagt ccaagtactg gaaagaggag tgctttggac ttacagctga acttgtagtc  
 180  
 gataaagcca tggagttaag gtttgtgggt ggcgtctatg gtggcaacat aaaaccaaca  
 240  
 ccctttctgt gtttaacctt gaagatgctt caaattcaac ccgagaagga tatcattgta  
 300  
 gagtttatca aaaatgaaga tttcaagtat gtccgcatgc tgggggcact ttacatgagg  
 360  
 ctgacaggca ctgcaattga ttgctacaag tacttggaac ctttgtacaa tgactatcga  
 420  
 aaaatcaaga gccagaaccg aaatggggag tttgaattga tgcattgtga tgagtttatt  
 480

gatgaactat tgcacagtga gagagtctgt gatatcattc tgccccgact acagaaaacgc  
 540  
 tatgtattag aggaagctga gcaactggag cctcgagtta gtgctctgga agaggacatg  
 600  
 gatgatgtgg agtccagtga agaggaagaa gaggaggatg agaagttgga aagagtgcc  
 660  
 tcacctgatc accgccggag aagctaccga gacttggaca agccccgtcg ctctcccaca  
 720  
 ctgcgctaca ggaggagtag gagccggtct cccagaaggc ggagtcgatc tcccaaaagg  
 780  
 agaagcccct cccctcgccg agaaaggcat cggagcaaga gtccaagacg tcaccgcagc  
 840  
 aggtccccgag atcggcggca cagatcccgt tccaagtccc caggtcatca ccgtagtcac  
 900  
 agacacagga gccactcaaa gtctcccgaa aggtctaaga agagccacaa gaagagccgg  
 960  
 agaggggaatg agtaatggac tcagtttggg tttagtccac atggcctcct gtggatataa  
 1020  
 ggatatctgt atgtggaagg attaagatct cccccaggca gctataagaa tatttttagtt  
 1080  
 tttttcttat caagtttctc aacctttatt tttaatgaag gaggtgctga gttttgtatc  
 1140  
 tttttaatca taatcaacat cagtttttga cccaactaac cttgactgta ttcaaactta  
 1200  
 tgagagtata aaggatctgg aggttgggga tatgactgac aaggaaaggc tgtggccacc  
 1260  
 tgatgaccct ttcccttttt attaaaccgg acacacc  
 1297

<210> 1758

<211> 312

<212> PRT

<213> Homo sapiens

<400> 1758

Met	Ala	Asn	Arg	Thr	Val	Lys	Asp	Ala	His	Ser	Ile	His	Gly	Thr	Asn
1				5				10					15		
Pro	Gln	Tyr	Leu	Val	Glu	Lys	Ile	Ile	Arg	Thr	Arg	Ile	Tyr	Glu	Ser
			20					25					30		
Lys	Tyr	Trp	Lys	Glu	Glu	Cys	Phe	Gly	Leu	Thr	Ala	Glu	Leu	Val	Val
			35				40					45			
Asp	Lys	Ala	Met	Glu	Leu	Arg	Phe	Val	Gly	Gly	Val	Tyr	Gly	Gly	Asn
			50			55					60				
Ile	Lys	Pro	Thr	Pro	Phe	Leu	Cys	Leu	Thr	Leu	Lys	Met	Leu	Gln	Ile
					70					75				80	
Gln	Pro	Glu	Lys	Asp	Ile	Ile	Val	Glu	Phe	Ile	Lys	Asn	Glu	Asp	Phe
				85					90					95	
Lys	Tyr	Val	Arg	Met	Leu	Gly	Ala	Leu	Tyr	Met	Arg	Leu	Thr	Gly	Thr
				100				105					110		
Ala	Ile	Asp	Cys	Tyr	Lys	Tyr	Leu	Glu	Pro	Leu	Tyr	Asn	Asp	Tyr	Arg
				115				120				125			
Lys	Ile	Lys	Ser	Gln	Asn	Arg	Asn	Gly	Glu	Phe	Glu	Leu	Met	His	Val
				130			135				140				
Asp	Glu	Phe	Ile	Asp	Glu	Leu	Leu	His	Ser	Glu	Arg	Val	Cys	Asp	Ile

```

145          150          155          160
Ile Leu Pro Arg Leu Gln Lys Arg Tyr Val Leu Glu Glu Ala Glu Gln
          165          170          175
Leu Glu Pro Arg Val Ser Ala Leu Glu Glu Asp Met Asp Asp Val Glu
          180          185          190
Ser Ser Glu Glu Glu Glu Glu Glu Asp Glu Lys Leu Glu Arg Val Pro
          195          200          205
Ser Pro Asp His Arg Arg Arg Ser Tyr Arg Asp Leu Asp Lys Pro Arg
          210          215          220
Arg Ser Pro Thr Leu Arg Tyr Arg Arg Ser Arg Ser Arg Ser Pro Arg
225          230          235          240
Arg Arg Ser Arg Ser Pro Lys Arg Arg Ser Pro Ser Pro Arg Arg Glu
          245          250          255
Arg His Arg Ser Lys Ser Pro Arg Arg His Arg Ser Arg Ser Arg Asp
          260          265          270
Arg Arg His Arg Ser Arg Ser Lys Ser Pro Gly His His Arg Ser His
          275          280          285
Arg His Arg Ser His Ser Lys Ser Pro Glu Arg Ser Lys Lys Ser His
          290          295          300
Lys Lys Ser Arg Arg Gly Asn Glu
305          310

```

&lt;210&gt; 1759

&lt;211&gt; 324

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1759

```

aattccatag tcctcatggg caagagttac acagcgtgga ggaccaactc ccaggcactc
60
ggcctgggca gacacaatta ttgtcggaat ccagatggtg atgccagacc ttggtgccat
120
gtgatgaagg accgaaagct gacgtgggaa tactgtgaca tgtcccatg ctccacctgt
180
ggcctgaggc agtgcaaacg gcctcagttt agaactaaag gaggactcta cacagacatc
240
acctcacacc cttggcaggc tgccatcttt gtcagcaaca agagggtctcc tggagagaga
300
ttcctttgtg gaggggtgct gatc
324

```

&lt;210&gt; 1760

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1760

```

Asn Ser Ile Val Leu Met Gly Lys Ser Tyr Thr Ala Trp Arg Thr Asn
  1           5           10           15
Ser Gln Ala Leu Gly Leu Gly Arg His Asn Tyr Cys Arg Asn Pro Asp
          20          25          30
Gly Asp Ala Arg Pro Trp Cys His Val Met Lys Asp Arg Lys Leu Thr
          35          40          45
Trp Glu Tyr Cys Asp Met Ser Pro Cys Ser Thr Cys Gly Leu Arg Gln

```



```

      50              55              60
Cys Lys Arg Pro Gln Phe Arg Thr Lys Gly Gly Leu Tyr Thr Asp Ile
65              70              75              80
Thr Ser His Pro Trp Gln Ala Ala Ile Phe Val Ser Asn Lys Arg Ser
      85              90              95
Pro Gly Glu Arg Phe Leu Cys Gly Gly Val Leu Ile
      100              105

```

<210> 1761  
 <211> 351  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1761
ngcgatctcg gctcactaca acctcgggtga cagagcgaga ctctatccca aaaaaataaa
60
aataaaaaatc aactggagaa ggaaatgggg ttggggagca tcctctgaat atataaaggc
120
agccattcat ttaggagag gaggtagaag gaaatgctgt ttgtcgatgg ttcttttcca
180
gagaggaaga gaggagaaag gaagagcggg gagcaggtgg ggagcccgc gtaagacccc
240
acagtggggc caggtggtct tgcaccctgt attcccactt tggctggggc agcccagagt
300
ccaggccagc aggtaatgcc ccagccatgc ccactcggtc ctattggatc c
351

```

<210> 1762  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1762
Met Ala Gly Ala Leu Pro Ala Gly Leu Asp Ser Gly Leu Pro Gln Pro
1              5              10              15
Lys Trp Glu Tyr Arg Val Gln Asp His Leu Ala Pro Leu Trp Gly Leu
      20              25              30
Thr Ala Gly Ser Pro Pro Ala Pro Arg Ser Ser Phe Leu Leu Ser Ser
      35              40              45
Ser Leu Glu Lys Asn His Arg Gln Thr Ala Phe Pro Ser Thr Ser Ser
      50              55              60
Pro Thr Met Asn Gly Cys Leu Tyr Ile Phe Arg Gly Cys Ser Pro Thr
65              70              75              80
Pro Phe Pro Ser Pro Val Asp Phe Tyr Phe Tyr Phe Phe Gly Ile Glu
      85              90              95
Ser Arg Ser Val Thr Glu Val Val Val Ser Arg Asp Arg
      100              105

```

<210> 1763  
 <211> 356  
 <212> DNA  
 <213> Homo sapiens

<400> 1763

ggcgcgcggg ggcgcgatgt ggagcgggca cttaccggtt tcatggccaa gacaggcgag  
 60  
 actcagagtc ttttcaaaga tgacgtcagc acatttccat tgattgctgc cagacctttc  
 120  
 accatcccct acctgacagc tcttcttccg tctgaactgg agatgcaaca aatggaagag  
 180  
 acagattcct cggagcagga tgaacagaca gacacagaga accttgctct tcatatcagc  
 240  
 atggaggatt ctggagccga gaaagagaac acctctgtcc tgcagcagaa cccctccttg  
 300  
 tcgggtagcc ggaatgggga ggagaacatc atcgataacc cttatctgcg accggt  
 356

<210> 1764

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1764

Ala	Arg	Arg	Gly	Arg	Asp	Val	Glu	Arg	Ala	Leu	Thr	Arg	Phe	Met	Ala
1				5					10					15	
Lys	Thr	Gly	Glu	Thr	Gln	Ser	Leu	Phe	Lys	Asp	Asp	Val	Ser	Thr	Phe
			20					25					30		
Pro	Leu	Ile	Ala	Ala	Arg	Pro	Phe	Thr	Ile	Pro	Tyr	Leu	Thr	Ala	Leu
		35					40					45			
Leu	Pro	Ser	Glu	Leu	Glu	Met	Gln	Gln	Met	Glu	Glu	Thr	Asp	Ser	Ser
	50					55				60					
Glu	Gln	Asp	Glu	Gln	Thr	Asp	Thr	Glu	Asn	Leu	Ala	Leu	His	Ile	Ser
65					70				75					80	
Met	Glu	Asp	Ser	Gly	Ala	Glu	Lys	Glu	Asn	Thr	Ser	Val	Leu	Gln	Gln
				85					90					95	
Asn	Pro	Ser	Leu	Ser	Gly	Ser	Arg	Asn	Gly	Glu	Glu	Asn	Ile	Ile	Asp
			100					105					110		
Asn	Pro	Tyr	Leu	Arg	Pro										
			115												

<210> 1765

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1765

cggccgcatt cttcgtgact ggcgctccgc cgccggtgca aaagtgtcag gaaataccag  
 60  
 tcatgactat gtttagccgc acctctctgc agtatgcat cgttctggca gcgctgggag  
 120  
 gtgccggtct ggcgctctgg gccatgtcga gtgcgacgga ggccaatcag gcggaaattg  
 180  
 cccaggccag gccaggcatt attgcggcgg cgcgcggtgt cgtggatgtc gagggcggcc  
 240  
 tgctgcggct ctccaccag cgcgacgggg tgattcagga tgtgccggtg aaggaaggac  
 300  
 agcgggtcaa agccggcgat atcctcgccg cgctcgacaa tcgccgcgaa ctgatcg  
 357

<210> 1766  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 1766  
 Met Thr Met Phe Ser Arg Thr Ser Leu Gln Tyr Ala Ile Val Leu Ala  
 1 5 10 15  
 Ala Leu Gly Gly Ala Gly Leu Ala Leu Trp Ala Met Ser Ser Ala Thr  
 20 25 30  
 Glu Ala Asn Gln Ala Glu Ile Ala Gln Ala Arg Pro Gly Ile Ile Ala  
 35 40 45  
 Ala Ala Arg Gly Val Val Asp Val Glu Gly Gly Leu Leu Arg Leu Ser  
 50 55 60  
 Thr Gln Arg Asp Gly Val Ile Gln Asp Val Pro Val Lys Glu Gly Gln  
 65 70 75 80  
 Arg Val Lys Ala Gly Asp Ile Leu Ala Ala Leu Asp Asn Arg Arg Glu  
 85 90 95  
 Leu Ile

<210> 1767  
 <211> 297  
 <212> DNA  
 <213> Homo sapiens

<400> 1767  
 nnnccgcccac ggccgcccacg acgcaccgca ttgacgtgaa ccagggcgac gatgcccaacc  
 60  
 ccggccaaca cgccaggctg cttgacgccc ccagccaacc cgacgaacgc cccaccaaga  
 120  
 acgagcccga gccatccccg gccaatcaac gccagacgta tggccacaac gaggcgacg  
 180  
 agggacaaaac ccacctggag tccgtcggtg tgcattgccc ccaccaagct caacgtcgtc  
 240  
 aatggacagc acaccgccag ccagagggca tgatccggat cggttccggc gtagcgn  
 297

<210> 1768  
 <211> 73  
 <212> PRT  
 <213> Homo sapiens

<400> 1768  
 Met Pro Thr Pro Ala Asn Thr Pro Gly Cys Leu Thr Pro Pro Ala Asn  
 1 5 10 15  
 Pro Thr Asn Ala Pro Pro Arg Thr Ser Pro Ser His Pro Arg Pro Ile  
 20 25 30  
 Asn Ala Arg Arg Met Ala Thr Thr Ser Ala Thr Arg Asp Lys Pro Thr  
 35 40 45  
 Trp Ser Pro Ser Leu Cys Met Pro Pro Thr Thr Leu Asn Val Val Asn  
 50 55 60  
 Gly Gln His Thr Ala Ser Gln Arg Ala

65

70

<210> 1769  
 <211> 474  
 <212> DNA  
 <213> Homo sapiens

<400> 1769  
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 cagggtcatt ccgttcgtgg ccctgccatt gaggtgacga aagggtcagt tagcgtcgag  
 120  
 accgttgaga tcctccatac tcccgcgacc acgcattcgt gggtcgccgt ccaggcattg  
 180  
 ccgaagtccg atagagctga gctggcggtg gcgaccctca ccgagatggg agttcacgaa  
 240  
 atcctcgcct ggcaggctga tcggagcatc gtgcgatgga agggcgacaa gcaagccaag  
 300  
 ggcgtcgcga ggtggcaagc ggctgccgtg gaggccacca aacagtctcg acgttttctt  
 360  
 gtgccacagg tagaactagc gcaaaccgtg gaagttgtta agcggatttg caatgcccag  
 420  
 gccgcctacg ttttgcacga gtcggccagt gaaccgctgg tgcattcagga gctc  
 474

<210> 1770  
 <211> 158  
 <212> PRT  
 <213> Homo sapiens

<400> 1770  
 His His Ala Gly Ser Val Arg Arg Ile Arg Val Gly Glu Ser Val Leu  
 1 5 10 15  
 Val Thr Asp Gly Gln Gly His Ala Val Arg Gly Pro Ala Ile Glu Val  
 20 25 30  
 Thr Lys Gly Ser Val Ser Val Glu Thr Val Glu Ile Leu His Thr Pro  
 35 40 45  
 Ala Thr Thr His Arg Trp Val Ala Val Gln Ala Leu Pro Lys Ser Asp  
 50 55 60  
 Arg Ala Glu Leu Ala Val Ala Thr Leu Thr Glu Met Gly Val His Glu  
 65 70 75 80  
 Ile Leu Ala Trp Gln Ala Asp Arg Ser Ile Val Arg Trp Lys Gly Asp  
 85 90 95  
 Lys Gln Ala Lys Gly Val Ala Arg Trp Gln Ala Ala Ala Arg Glu Ala  
 100 105 110  
 Thr Lys Gln Ser Arg Arg Phe Leu Val Pro Gln Val Glu Leu Ala Gln  
 115 120 125  
 Thr Arg Glu Val Val Lys Arg Ile Cys Asn Ala Gln Ala Ala Tyr Val  
 130 135 140  
 Leu His Glu Ser Ala Ser Glu Pro Leu Val His Gln Glu Leu  
 145 150 155

<210> 1771  
 <211> 287

<212> DNA

<213> Homo sapiens

<400> 1771

```

acgcgtgatg ggtaattcta atacatgcaa agaattatct ctgcaagtat actcagatat
60
taataacagc ggggtgtcgca gaggaagaag cctgggagaa tggaagtcag ggaaggagag
120
caacaggctt ctcaactctgt gccatgagca tgtgctagcc atggagacac tctgcatggt
180
acctagaact gctgattcat tgctctggaa ttattcagct attcaagacc cagtgaata
240
cagcaagcag ctttcattca tacacacaca tgtgcatcca tgtgcac
287

```

<210> 1772

<211> 93

<212> PRT

<213> Homo sapiens

<400> 1772

```

Met Gly Asn Ser Asn Thr Cys Lys Glu Leu Ser Leu Gln Val Tyr Ser
1           5           10           15
Asp Ile Asn Asn Ser Gly Cys Arg Arg Gly Arg Ser Leu Gly Glu Trp
20           25           30
Lys Ser Gly Lys Glu Ser Asn Arg Leu Leu Thr Leu Cys His Glu His
35           40           45
Val Leu Ala Met Glu Thr Leu Cys Met Leu Pro Arg Thr Ala Asp Ser
50           55           60
Leu Leu Trp Asn Tyr Ser Ala Ile Gln Asp Pro Val Lys Tyr Ser Lys
65           70           75           80
Gln Leu Ser Phe Ile His Thr His Val His Pro Cys Ala
85           90

```

<210> 1773

<211> 393

<212> DNA

<213> Homo sapiens

<400> 1773

```

accggtgagt tctacgtccc gggttaaccac ctccggagggtg aacaggcgca cctcgacgtc
60
ttcgattctc cgcttaacga gtacgcagcg atgggatttg agtacggcta ctctgttgcc
120
cgtccggatt ctctggtatt gtgggaagcc caattcggcg atttcaccaa cgggtgcccag
180
acgatcatcg atgagttcat cgctcgggt ggctccaagt ggggtcagaa gtcgggagtc
240
gtgctgctgc tgccgcacgg ttacgaaggt caggggcctg atcactcgtc ggcccgctctg
300
gagcgcttcc tcaatctatg cagtgaagac gctttggccg tctgccagcc ctcgaccccg
360
gcaagctaca gccatttatt gcgtcagcac gcg
393

```

<210> 1774  
 <211> 131  
 <212> PRT  
 <213> Homo sapiens

<400> 1774  
 Thr Gly Glu Phe Tyr Val Pro Val Asn His Leu Gly Gly Glu Gln Ala  
 1 5 10 15  
 His Leu Asp Val Phe Asp Ser Pro Leu Asn Glu Tyr Ala Ala Met Gly  
 20 25 30  
 Phe Glu Tyr Gly Tyr Ser Val Ala Arg Pro Asp Ser Leu Val Leu Trp  
 35 40 45  
 Glu Ala Gln Phe Gly Asp Phe Thr Asn Gly Ala Gln Thr Ile Ile Asp  
 50 55 60  
 Glu Phe Ile Ala Ser Ala Gly Ser Lys Trp Gly Gln Lys Ser Gly Val  
 65 70 75 80  
 Val Leu Leu Leu Pro His Gly Tyr Glu Gly Gln Gly Pro Asp His Ser  
 85 90 95  
 Ser Ala Arg Leu Glu Arg Phe Leu Asn Leu Cys Ser Glu Asp Ala Leu  
 100 105 110  
 Ala Val Cys Gln Pro Ser Thr Pro Ala Ser Tyr Ser His Leu Leu Arg  
 115 120 125  
 Gln His Ala  
 130

<210> 1775  
 <211> 369  
 <212> DNA  
 <213> Homo sapiens

<400> 1775  
 nncctccgag cagctctccg gggcagaccc cagctgcaag ccacagcccg gccctggtaa  
 60  
 cgggagggca tcgctaggga ggggtggggc ggcccggctt cgatgcagcc atgtgggagg  
 120  
 gccactctca gagaccccc gccttccttg ccacccccac ccagagggg aagctggagc  
 180  
 tgggaggctg cagacccagg ccaaggtgtg gccagggctg gctttcttgg gaggtttga  
 240  
 gcatcctgct tcctggccac ccagctctgg ggctgctgtc aactcttgat ttgtagacat  
 300  
 cactccagcc tctggcctgt caccctgaac ctcccccatg tctgtgtctt ttctcactgg  
 360  
 aacaccggt  
 369

<210> 1776  
 <211> 59  
 <212> PRT  
 <213> Homo sapiens

<400> 1776  
 Arg Glu Gly Ile Ala Arg Glu Gly Trp Gly Gly Pro Ala Ser Met Gln

```

      1             5             10             15
Pro Cys Gly Arg Ala Thr Leu Arg Asp Pro Pro Pro Ser Leu Pro Pro
      20             25             30
Pro Pro Gln Arg Gly Ser Trp Ser Trp Glu Ala Ala Asp Pro Gly Gln
      35             40             45
Gly Val Ala Arg Ala Gly Phe Leu Gly Arg Leu
      50             55

```

<210> 1777  
 <211> 370  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1777
agcttcttat cactatcctt tagtgctttt tggctctacct tagcggtaat gctccatcaa
60
gaatatgggtt ttggtagtgc aactgcggga ttttttggcc tcgctgggtgc cgccggagct
120
ttagcagcac cactgtccgg taaactaaca gataaacaag gaccgacacg ggtcacgcag
180
ctgggtgctg ccttagttgt cgtctctttc gcacttatgt tgttattgcc ttacttcagt
240
atcagtaccc aagttataat gattattggt gctaccatag tgtttgactt tgggtgttcag
300
gcggcactta ttgctcatca aaccttagtg tataacattg actctaccgc tcgtggacgc
360
cttaacgcgt
370

```

<210> 1778  
 <211> 123  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1778
Ser Phe Leu Ser Leu Ser Phe Ser Ala Phe Trp Ser Thr Leu Ala Val
1             5             10             15
Met Leu His Gln Glu Tyr Gly Phe Gly Ser Ala Thr Ala Gly Phe Phe
      20             25             30
Gly Leu Ala Gly Ala Ala Gly Ala Leu Ala Ala Pro Leu Ser Gly Lys
      35             40             45
Leu Thr Asp Lys Gln Gly Pro Thr Arg Val Thr Gln Leu Gly Ala Ala
      50             55             60
Leu Val Val Val Ser Phe Ala Ser Met Leu Leu Leu Pro Tyr Phe Ser
65             70             75             80
Ile Ser Thr Gln Val Ile Met Ile Ile Val Ala Thr Ile Val Phe Asp
      85             90             95
Phe Gly Val Gln Ala Ala Leu Ile Ala His Gln Thr Leu Val Tyr Asn
      100            105            110
Ile Asp Ser Thr Ala Arg Gly Arg Leu Asn Ala
      115            120

```

<210> 1779  
 <211> 345

<212> DNA

<213> Homo sapiens

<400> 1779

```
ccatgtgtgt gtatatgctc gtgtgtgatg gtatgtatat gtgtatatgt gnntatatgt
60
atacacgtgt gttatgggtgt gtatatatgt atatacgtgt gtgtatatat atgtatatgg
120
gtatgtgtgt gcatgtgcgt atgggtgtgt atatgtgtat atatgtaggt gtgtatatct
180
gggaatatat ggggtgtgtat atgtgtgtat aggtttttat atgtggggaa atatttaaac
240
ctgtgtatat tggaatgtgt gtgtatatgt gtgtatatat ggnggtgtgt atgtacatgt
300
atgtgtgtat atatgtgtgt atatacgtag gtgtgcatat gtgtg
345
```

<210> 1780

<211> 55

<212> PRT

<213> Homo sapiens

<400> 1780

```
Pro Cys Val Cys Ile Cys Ser Cys Val Met Val Cys Ile Cys Val Tyr
 1           5           10          15
Val Xaa Ile Cys Ile His Val Cys Tyr Gly Val Tyr Ile Cys Ile Tyr
          20          25          30
Val Cys Val Tyr Ile Cys Ile Trp Val Cys Val Cys Met Cys Val Trp
          35          40          45
Val Cys Ile Cys Val Tyr Met
          50          55
```

<210> 1781

<211> 349

<212> DNA

<213> Homo sapiens

<400> 1781

```
nacgcgtcat gctaaatttt gccctttatg gcaacatttt cgtcagaaca agcggaagag
60
aagctactat ccaagtttca tacgccggtt aaaagaaaac atgatgatac gagatcatct
120
gatgtgaaca caacgcaaac tggttcaagc gccacgcca ttacacctgt acccttactg
180
cccagtgcac aagagcccag ttatctttgc cagtgggtgcg ctccccagac acgaaagcac
240
aagacatggg aggggtgatgc tattcttata ttgcatggaa ataaaactac ttgttcgcta
300
cgatccgcac atgatggcag catgctagtg acgaatgctg ccttccgga
349
```

<210> 1782

<211> 107

<212> PRT



&lt;213&gt; Homo sapiens

&lt;400&gt; 1782

```

Met Ala Thr Phe Ser Ser Glu Gln Ala Glu Glu Lys Leu Leu Ser Lys
 1           5           10           15
Phe His Thr Pro Val Lys Arg Lys His Asp Asp Thr Arg Ser Ser Asp
           20           25           30
Val Asn Thr Thr Gln Thr Gly Ser Ser Ala Thr Pro Ile Thr Pro Val
           35           40           45
Pro Leu Leu Pro Ser Ala Gln Glu Pro Ser Tyr Leu Cys Gln Trp Cys
           50           55           60
Ala Pro Gln Thr Arg Lys His Lys Thr Trp Glu Gly Asp Ala Ile Leu
65           70           75           80
Ile Leu His Gly Asn Lys Thr Thr Cys Ser Leu Arg Ser Ala His Asp
           85           90           95
Gly Ser Met Leu Val Thr Asn Ala Ala Phe Arg
           100           105

```

&lt;210&gt; 1783

&lt;211&gt; 1829

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1783

```

gtgcacgact tcgacgccag cctctcgggc atcgggcagg aactgggccc cggcgcttac
60
agcatgagtg atgtottggc attgcccatt ttcaagcagg aagattccag ccttccattg
120
gatggtgaaa cagagcaccc accctttcag tatgtgatgt gtgctgcaac gtcaccagca
180
gtaaaactgc atgatgaaac gcttacttat ttgaaccaag gtcagtcata tgaaattcgg
240
atgctggata atcggaataa gggatgatatg cctgagatca atggaaaatt agtaaagagc
300
atcataaggg ttgtattcca tgacagacgg ctacaatata cagagcatca gcaacttgaa
360
ggatggaagt ggaatcgccc aggagacaga cttcttgatt tagatattcc aatgtctgtg
420
ggaataattg acacaaggac gaatccaggc cagttaaatt cggttgaatt tctgtgggac
480
ccagcaaac gcacctctgc tttcattcag gtacactgca tcagcacaga atttactcca
540
cggaagcacg gaggtgaaaa gggagtggcc tttaggatcc aggttgacac ctttaagcag
600
aatgaaaatg gagaatacac agatcatcta cactcagcta gctgccaaat caaagttttt
660
aagcctaaag gtgcagacag gaaacaaaaa actgaccgag agaagatgga gaagagaaca
720
gtcatgaaa aagaaaagta tcagccgtcc tatgatacca caatcctcac agagatgagg
780
cttgagccta taattgaaga tgcagttgaa catgagcaga aanaagtcca gcaagcggac
840
tttgccgcag actacgggtg ttctctggca aagcgaggca gttgttctcc gtggcccgat
900

```

gccccacag cctatgtgaa taacagccct tccccagcgc ccactttcac ctccccacag  
 960  
 cagagcactt gcagtgtccc agacagcaat tcttcttccc caaatcatca gggagatgga  
 1020  
 gcttcacaga cctctggtga acaaattcag ccttcagcta cgatccagga aacacagcaa  
 1080  
 tggctgtca aaaacagatt ctcttctac acaagactgt tctctaattt ttcaggtgcc  
 1140  
 gacttattaa aactgacaaa ggaggattta gttcaaattt gtggtgcagc cgatggaatt  
 1200  
 cggctctata attcactgaa gtcaaggctc gtttagacccc gtttaacat ctatgtctgc  
 1260  
 cgggagcagc caagcagcac agtgctgcaa gggcagcagc aagctgcaag cagtgcgaagc  
 1320  
 gagaatggca gtggggcacc ctatgtttat catgcaatct acttggaaga aatgattgcc  
 1380  
 tcagaagttg ctcgaaaact tgcgctggtg tttaatatcc ctctccacca aattaatcag  
 1440  
 gtttacagac aggggtccac cggtattcac attcttggtta gtgatcagggt aaatcaaadc  
 1500  
 atttgttttt ccttttcaga ctggtattta cttttatata tgtaattgta gaactgtaga  
 1560  
 aaaattctgt gacctctttt gaaaatactt atgagaatca ttttcagaga gttgggaatc  
 1620  
 actttggaag aacttataac caagagtttc aggcaccta gtgataatat ggaatacaag  
 1680  
 ccaaggaaaa ctggcttagc ctccccccag cccttttagga tgcagccaat cactggggca  
 1740  
 ctctagggat agtggcaggc tttggccctt tttatgaggt gagtcactgg atgtgttttc  
 1800  
 cttttgtcta ttatttgatg actaattta  
 1829

&lt;210&gt; 1784

&lt;211&gt; 514

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1784

Val	His	Asp	Phe	Asp	Ala	Ser	Leu	Ser	Gly	Ile	Gly	Gln	Glu	Leu	Gly
1				5					10					15	
Ala	Gly	Ala	Tyr	Ser	Met	Ser	Asp	Val	Leu	Ala	Leu	Pro	Ile	Phe	Lys
			20					25					30		
Gln	Glu	Asp	Ser	Ser	Leu	Pro	Leu	Asp	Gly	Glu	Thr	Glu	His	Pro	Pro
		35					40					45			
Phe	Gln	Tyr	Val	Met	Cys	Ala	Ala	Thr	Ser	Pro	Ala	Val	Lys	Leu	His
		50					55				60				
Asp	Glu	Thr	Leu	Thr	Tyr	Leu	Asn	Gln	Gly	Gln	Ser	Tyr	Glu	Ile	Arg
65					70				75					80	
Met	Leu	Asp	Asn	Arg	Lys	Met	Gly	Asp	Met	Pro	Glu	Ile	Asn	Gly	Lys
				85					90					95	
Leu	Val	Lys	Ser	Ile	Ile	Arg	Val	Val	Phe	His	Asp	Arg	Arg	Leu	Gln
			100					105					110		
Tyr	Thr	Glu	His	Gln	Gln	Leu	Glu	Gly	Trp	Lys	Trp	Asn	Arg	Pro	Gly

		115					120					125				
Asp	Arg	Leu	Leu	Asp	Leu	Asp	Ile	Pro	Met	Ser	Val	Gly	Ile	Ile	Asp	
	130					135					140					
Thr	Arg	Thr	Asn	Pro	Gly	Gln	Leu	Asn	Ala	Val	Glu	Phe	Leu	Trp	Asp	
145					150					155					160	
Pro	Ala	Lys	Arg	Thr	Ser	Ala	Phe	Ile	Gln	Val	His	Cys	Ile	Ser	Thr	
					165				170						175	
Glu	Phe	Thr	Pro	Arg	Lys	His	Gly	Gly	Glu	Lys	Gly	Val	Pro	Phe	Arg	
					180				185						190	
Ile	Gln	Val	Asp	Thr	Phe	Lys	Gln	Asn	Glu	Asn	Gly	Glu	Tyr	Thr	Asp	
							200					205				
His	Leu	His	Ser	Ala	Ser	Cys	Gln	Ile	Lys	Val	Phe	Lys	Pro	Lys	Gly	
	210					215					220					
Ala	Asp	Arg	Lys	Gln	Lys	Thr	Asp	Arg	Glu	Lys	Met	Glu	Lys	Arg	Thr	
225					230					235					240	
Ala	His	Glu	Lys	Glu	Lys	Tyr	Gln	Pro	Ser	Tyr	Asp	Thr	Thr	Ile	Leu	
					245				250						255	
Thr	Glu	Met	Arg	Leu	Glu	Pro	Ile	Ile	Glu	Asp	Ala	Val	Glu	His	Glu	
					260				265						270	
Gln	Lys	Xaa	Val	Gln	Gln	Ala	Asp	Phe	Ala	Ala	Asp	Tyr	Gly	Asp	Ser	
							280					285				
Leu	Ala	Lys	Arg	Gly	Ser	Cys	Ser	Pro	Trp	Pro	Asp	Ala	Pro	Thr	Ala	
	290					295					300					
Tyr	Val	Asn	Asn	Ser	Pro	Ser	Pro	Ala	Pro	Thr	Phe	Thr	Ser	Pro	Gln	
305					310						315				320	
Gln	Ser	Thr	Cys	Ser	Val	Pro	Asp	Ser	Asn	Ser	Ser	Ser	Pro	Asn	His	
					325				330						335	
Gln	Gly	Asp	Gly	Ala	Ser	Gln	Thr	Ser	Gly	Glu	Gln	Ile	Gln	Pro	Ser	
					340				345						350	
Ala	Thr	Ile	Gln	Glu	Thr	Gln	Gln	Trp	Leu	Leu	Lys	Asn	Arg	Phe	Ser	
							360					365				
Ser	Tyr	Thr	Arg	Leu	Phe	Ser	Asn	Phe	Ser	Gly	Ala	Asp	Leu	Leu	Lys	
	370					375					380					
Leu	Thr	Lys	Glu	Asp	Leu	Val	Gln	Ile	Cys	Gly	Ala	Ala	Asp	Gly	Ile	
385					390					395					400	
Arg	Leu	Tyr	Asn	Ser	Leu	Lys	Ser	Arg	Ser	Val	Arg	Pro	Arg	Leu	Thr	
					405				410						415	
Ile	Tyr	Val	Cys	Arg	Glu	Gln	Pro	Ser	Ser	Thr	Val	Leu	Gln	Gly	Gln	
					420				425						430	
Gln	Gln	Ala	Ala	Ser	Ser	Ala	Ser	Glu	Asn	Gly	Ser	Gly	Ala	Pro	Tyr	
					435				440				445			
Val	Tyr	His	Ala	Ile	Tyr	Leu	Glu	Glu	Met	Ile	Ala	Ser	Glu	Val	Ala	
	450					455					460					
Arg	Lys	Leu	Ala	Leu	Val	Phe	Asn	Ile	Pro	Leu	His	Gln	Ile	Asn	Gln	
465					470					475						

<210> 1785

<211> 381

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1785

atcacggacg cagaggagaa agggctgatt actccaggcg tgagtgttct gattgaacca  
 60  
 actagcggca acacagggcat tggactggcc tttatggctg ctgccaaggg ctacaaactt  
 120  
 acactcacia tgccctgcctc catgagcatg gagaggagga tcatattgaa ggcttttggt  
 180  
 gctgaacttg tccttactga cccactcttg ggaatgaaag gagctgtcaa gaaagcggaa  
 240  
 gagatacaag caaagacacc caactcgtac atccttcaac aatttgaaaa tccagctaac  
 300  
 ccaaagattc actatgagac tactgggcct gaaatctgga aagctacagc aggaaaaatt  
 360  
 gatggccttg tatctggtat c  
 381

&lt;210&gt; 1786

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1786

Ile	Thr	Asp	Ala	Glu	Glu	Lys	Gly	Leu	Ile	Thr	Pro	Gly	Val	Ser	Val
1				5				10					15		
Leu	Ile	Glu	Pro	Thr	Ser	Gly	Asn	Thr	Gly	Ile	Gly	Leu	Ala	Phe	Met
			20					25					30		
Ala	Ala	Ala	Lys	Gly	Tyr	Lys	Leu	Thr	Leu	Thr	Met	Pro	Ala	Ser	Met
			35				40					45			
Ser	Met	Glu	Arg	Arg	Ile	Ile	Leu	Lys	Ala	Phe	Gly	Ala	Glu	Leu	Val
	50					55					60				
Leu	Thr	Asp	Pro	Leu	Leu	Gly	Met	Lys	Gly	Ala	Val	Lys	Lys	Ala	Glu
65					70					75				80	
Glu	Ile	Gln	Ala	Lys	Thr	Pro	Asn	Ser	Tyr	Ile	Leu	Gln	Gln	Phe	Glu
				85					90					95	
Asn	Pro	Ala	Asn	Pro	Lys	Ile	His	Tyr	Glu	Thr	Thr	Gly	Pro	Glu	Ile
			100					105					110		
Trp	Lys	Ala	Thr	Ala	Gly	Lys	Ile	Asp	Gly	Leu	Val	Ser	Gly	Ile	
			115				120					125			

&lt;210&gt; 1787

&lt;211&gt; 294

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1787

gtgcacacag caattcaata tgccaagaca ccagggttgca gcagagaaag atttaattgt  
 60  
 agggtcacct aacaaggaga tgagaacaaa ctttaaactt atctctctaa ggaatttgga  
 120  
 cttcgggttt ttaagggtta gaatgggcca aaacatggac attattgatt ggtcaaagag  
 180

tacaggggtca tggaacctgg agatgaaaaa gccatattct catgctgac ctgttctct  
 240  
 gtggaaggtc ttcaaattgg ttgccggaat aaaagatctg tcaaacatct tagg  
 294

<210> 1788  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

<400> 1788  
 Met Pro Arg His Gln Val Ala Ala Glu Lys Asp Leu Ile Val Gly Ser  
 1 5 10 15  
 Pro Asn Lys Glu Met Arg Thr Asn Phe Lys Ser Ile Ser Leu Arg Asn  
 20 25 30  
 Leu Asp Phe Gly Phe Leu Arg Phe Arg Met Gly Gln Asn Met Asp Ile  
 35 40 45  
 Ile Asp Trp Ser Lys Ser Thr Gly Ser Trp Asn Leu Glu Met Lys Lys  
 50 55 60  
 Pro Tyr Ser His Ala Asp Pro Val Pro Leu Trp Lys Val Phe Lys Leu  
 65 70 75 80  
 Val Ala Gly Ile Lys Asp Leu Ser Asn Ile Leu  
 85 90

<210> 1789  
 <211> 353  
 <212> DNA  
 <213> Homo sapiens

<400> 1789  
 ttccacata caccacgcg gcatgtctg acagagatgc acaccctag cacatattca  
 60  
 cacacacaga catgccacac cccgccatcc cccacactc gtacacgcc accaccctc  
 120  
 gcaggcacac atgcacacac gcgcgcgcac acgcacacac acccccagcc cggaccggcc  
 180  
 gacctgctcc cgggggtctc tccgcaggc aggtctctc gccgagtctc cgaaaagggg  
 240  
 cggtcgtggc ggccctggcg ccagctggg caacgcttcg tggtatctca ccgttctct  
 300  
 ctgttggtgcc cagcgcgccg actgaagatc cggatcttca gtcctggcg cgc  
 353

<210> 1790  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 1790  
 Met His Thr Pro Ser Thr Tyr Ser His Thr Gln Thr Cys His Thr Pro  
 1 5 10 15  
 Pro Ser Pro His Thr Arg Thr Arg Pro Pro Pro Leu Ala Gly Thr His  
 20 25 30  
 Ala His Thr Arg Ala His Thr His Thr His Pro Gln Pro Gly Pro Ala

	35					40					45								
Asp	Leu	Leu	Pro	Gly	Val	Ser	Pro	Ala	Gly	Arg	Ser	Pro	Arg	Arg	Val				
	50					55					60								
Ser	Glu	Lys	Gly	Arg	Ser	Trp	Arg	Pro	Trp	Arg	Pro	Ala	Gly	Gln	Arg				
65					70					75				80					
Phe	Val	Val	Ser	His	Arg	Phe	Ser	Leu	Leu	Cys	Pro	Ala	Pro	Arg	Leu				
			85					90					95						
Lys	Ile	Arg	Ile	Phe	Ser	Pro	Trp	Arg											
			100					105											

<210> 1791  
 <211> 355  
 <212> DNA  
 <213> Homo sapiens

<400> 1791  
 aaatttcagt tagagattag ggaaaataaa gatgttattt tttcccatcc tagtttacag  
 60  
 accccccaga aaccactca tggattctcc cgagtctttg gacctggctc agacaccctt  
 120  
 gctttggatc aagccaatgc atgtatcccc taacacaccc atgctttatg tggtccttgc  
 180  
 ccttccttgc tcaggggact gcttggttaac ttcattgggt tggggacata tatattatag  
 240  
 gagagagaca gagaaaaaga aagagaggaa atgttattct ccttgtctgt atctgtatct  
 300  
 ccactccgat tccattccc tctgctgctc tctctctctc cctcccttca cgcgt  
 355

<210> 1792  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

Met	Leu	Phe	Phe	Pro	Ile	Leu	Val	Tyr	Arg	Pro	Pro	Arg	Asn	Pro	Leu				
1				5					10					15					
Met	Asp	Ser	Pro	Glu	Ser	Leu	Asp	Leu	Ala	Gln	Thr	Pro	Leu	Leu	Trp				
			20					25					30						
Ile	Lys	Pro	Met	His	Val	Ser	Pro	Asn	Thr	Pro	Met	Leu	Tyr	Val	Val				
			35				40					45							
Pro	Ala	Pro	Pro	Cys	Ser	Gly	Asp	Cys	Leu	Leu	Thr	Ser	Leu	Gly	Trp				
	50					55					60								
Gly	His	Ile	Tyr	Tyr	Arg	Arg	Glu	Thr	Glu	Lys	Lys	Lys	Glu	Arg	Lys				
65					70					75				80					
Cys	Tyr	Ser	Pro	Cys	Leu	Tyr	Leu	Tyr	Leu	His	Ser	Asp	Ser	His	Ser				
			85					90					95						
Leu	Cys	Cys	Ser	Pro	Leu	Ser	Pro	Pro	Phe	Thr	Arg								
			100					105											

<210> 1793  
 <211> 510  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1793

tgggttccag cccgtagatg accttggcct gggaggcctt ccgaaggcca cacccatata  
 60  
 caccctctcg gagctcctcg cttaccagtc gcccagaag cttgtccccc cagcagccag  
 120  
 agtcagccag acccttagca aacaccatag gggatcatctc aatctcttct ccaacttcac  
 180  
 cttcttctct ggagatgaat cctgacaaca cctcagggct gaggcagaag tcggtggagg  
 240  
 ccgagccgtg ctcatgtgg atggtgcacc gatacacacc gcagtctacg ggggaggcct  
 300  
 gcacgatggc caaggccgcc ggccctcat cccctgcgt cctgcccacc tcgcccactg  
 360  
 ggcgtgatc cttggcccat gtcaagactg agtcactaag aatgttgaaa aactggcacc  
 420  
 acagcttcag gctaccggag gcatcaggaa actgctccac ccgaatcttc cggatcacct  
 480  
 gtggggcttt cagcaggtct ttggctttcc  
 510

&lt;210&gt; 1794

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1794

Met	Thr	Leu	Ala	Trp	Glu	Ala	Phe	Arg	Arg	Pro	His	Pro	Tyr	Pro	Pro
1				5					10					15	
Pro	Arg	Ser	Ser	Ser	Leu	Thr	Ser	Arg	Pro	Lys	Ser	Leu	Ser	Pro	Gln
		20						25					30		
Gln	Pro	Glu	Ser	Ala	Arg	Pro	Leu	Ala	Asn	Thr	Ile	Gly	Val	Ile	Ser
		35					40					45			
Ile	Ser	Ser	Pro	Thr	Ser	Pro	Ser	Ser	Leu	Glu	Met	Asn	Pro	Asp	Asn
	50					55					60				
Thr	Ser	Gly	Leu	Arg	Gln	Lys	Ser	Val	Glu	Ala	Glu	Pro	Cys	Ser	Leu
65				70					75					80	
Trp	Met	Val	His	Arg	Tyr	Thr	Pro	Gln	Ser	Thr	Gly	Glu	Ala	Cys	Thr
			85					90						95	
Met	Ala	Lys	Ala	Ala	Gly	Pro	Ser	Ser	Pro	Ala	Leu	Leu	Pro	Thr	Ser
		100						105					110		
Pro	Thr	Gly	Arg												
		115													

&lt;210&gt; 1795

&lt;211&gt; 386

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1795

ctatgctctg agtcacttct ccaagcattc ctttctgttc ttccttcctt gggctgatca  
 60  
 tttcaagaag tcctacattc cagaaaactt gagaggtgct tcttctcttg aagccccttt  
 120

tcttttctgt gagctcaggg agcattctac atacctcagc tgtgtctgct atcttttctgt  
 180  
 taattatcaa tctttccata taaacagtaa aggaccacag tttattcatc agattcccca  
 240  
 tccaaacctg cacctgcata cataaacgca ctggataaat gtaccgcagt agacagaggg  
 300  
 tctccagggt gagagctcca tgagggcacc aatttttctg tgttttagctg tgtcctcaaa  
 360  
 gcaaggaagg gttgatccgg tctaga  
 386

<210> 1796  
 <211> 86  
 <212> PRT  
 <213> Homo sapiens

<400> 1796  
 Met Gln Val Gln Val Trp Met Gly Asn Leu Met Asn Lys Leu Trp Ser  
 1 5 10 15  
 Phe Thr Val Tyr Met Glu Arg Leu Ile Lys Gln Lys Ile Ala Asp  
 20 25 30  
 Thr Ala Glu Val Cys Arg Met Leu Pro Glu Leu Thr Glu Lys Lys Arg  
 35 40 45  
 Gly Phe Gln Arg Arg Ser Thr Ser Gln Val Phe Trp Asn Val Gly Leu  
 50 55 60  
 Leu Glu Met Ile Ser Pro Gly Lys Glu Glu Gln Lys Gly Met Leu Gly  
 65 70 75 80  
 Glu Val Thr Gln Ser Ile  
 85

<210> 1797  
 <211> 348  
 <212> DNA  
 <213> Homo sapiens

<400> 1797  
 aagcttcact atgttgccca ttccatgggc ggcgtgctgg tgcgtgacct gctggcggac  
 60  
 cggaatttgc cgatgtcatt gatcagggtca tctgtctggg ctcgccgcag cagggctcgc  
 120  
 gtgccgctaa tttgttggcg ccatttgctg ggcgcgcac cgtcaaatgg tgtatcacag  
 180  
 cgactatgtg atgccgcttg cgcccacgcc cggcagcgcg cgttggagcg ccatcaactc  
 240  
 acagatggac aacctggtgt tgccggtgac ctcggcaatt ttaccgggaa tgacccatgt  
 300  
 ggcggtggat tacctggggc attgttcggt attgtacagc ccacgcgt  
 348

<210> 1798  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens



&lt;400&gt; 1798

```

Met Gly Gly Val Leu Val Arg Asp Leu Leu Ala Asp Arg Asn Leu Pro
 1           5           10           15
Met Ser Leu Ile Arg Ser Ser Val Trp Ala Arg Arg Ser Arg Ala Arg
          20           25           30
Val Pro Leu Ile Cys Trp Arg His Leu Leu Ala Ala His Pro Ser Asn
          35           40           45
Gly Val Ser Gln Arg Leu Cys Asp Ala Ala Cys Ala His Ala Arg Gln
          50           55           60
Arg Ala Leu Glu Arg His Gln Leu Thr Asp Gly Gln Pro Gly Val Ala
65           70           75           80
Gly Asp Leu Gly Asn Phe Thr Gly Asn Asp Pro Cys Gly Gly Gly Leu
          85           90           95
Pro Gly Ala Leu Phe Val Ile Val Gln Pro Thr Arg
          100          105

```

&lt;210&gt; 1799

&lt;211&gt; 366

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1799

```

acgcgtcgcc tctgtctggt cgggattttc cttgctgtag ttaaccaaac caccggcgtc
60
aataccgtca tgtattacgc gcccaagggtg ttggagttcg caggaatgag caccagggcg
120
tcgattatatt cagaggtggc taatggagtc atgtctgtta ttggtgccgc tgcaggcttg
180
tggctcatcg aacggtttga tcgtcgtcac ctgcttatct tcgatgtcac ggcggtcggt
240
gtgtgtctcc ttggtattgc ggctactttc gggctggcaa ttgctcctca tgtgggtcaa
300
ggggtaccga agtgggcgcc tattctcgtg ctgcctctga tgagtatctt catgcttacc
360
gtgcac
366

```

&lt;210&gt; 1800

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1800

```

Thr Arg Arg Leu Leu Leu Val Gly Ile Phe Leu Ala Val Val Asn Gln
 1           5           10           15
Thr Thr Gly Val Asn Thr Val Met Tyr Tyr Ala Pro Lys Val Leu Glu
          20           25           30
Phe Ala Gly Met Ser Thr Gln Ala Ser Ile Ile Ser Glu Val Ala Asn
          35           40           45
Gly Val Met Ser Val Ile Gly Ala Ala Ala Gly Leu Trp Leu Ile Glu
          50           55           60
Arg Phe Asp Arg Arg His Leu Leu Ile Phe Asp Val Thr Ala Val Gly
65           70           75           80
Val Cys Leu Leu Gly Ile Ala Ala Thr Phe Gly Leu Ala Ile Ala Pro

```

```
<210> 1801
<211> 597
<212> DNA
<213> Homo sapiens
```

```
<210> 1802
<211> 199
<212> PRT
<213> Homo sapiens
```

1402

```

          115          120          125
Ser Ala Val Arg Ala Lys Asp Asp Phe Asp Ile Ala Gly Pro Leu Arg
      130          135          140
Ser Leu Asn Ile Asp Thr Gly Ala Gly Leu Glu Arg Ile Ala Tyr Leu
145          150          155          160
Leu Gln Gly Val Asp Asn Met Tyr Glu Thr Asp Gln Val Phe Pro Val
          165          170          175
Ile Glu Lys Ala Ser Glu Met Ser Gly Lys Arg Tyr Gly Val Arg His
          180          185          190
Asp Asp Asp Val Arg Leu Arg
      195

```

<210> 1803

<211> 708

<212> DNA

<213> Homo sapiens

<400> 1803

```

cccacaacga tggccgcat ggtggatggg gaagtgcctg aggaggtcac acctaaggac
60
ctcatcctgg ccctcatctc cgagatcggc accggtgggg gacaaggcca tatggctgag
120
tatcgcgggc aggccatcga gaagatgtcg atggaggggc gcatgacgat ctgcaatatg
180
tcgattgagt ggggagctcg cgtcggcatg gttgcttctg atgagaccac cttcacctac
240
ctcaaggatc gtccgcacgc tccgcgtggg gcacagtggg acaaggctgt cgcgtactgg
300
cgactctgc gtactgacga cgatgcgacc tttgacgctg agatccatgt ggacgcctcg
360
aatctcgccc ccttcgttac ctgggggtacc aaccgggggc agggatcccc cctaggcggt
420
gtggtgccgg ccgtcgaaga ctttgaggac gaggtagctc gcagcgcagc gtttgaggta
480
catggatttg accccgacga gatcggttcc cggtttgctg acatctttcg caataactct
540
gcgaacaacg gcttggtact ggctcaggtt gatcccaagg tcgtcggaga gttgtgggac
600
tttgccgagc agcatcctgg tgagcagctc accctctccc tcgagaatcg gacgattaac
660
cttcggggtc gcacgaccta cccgttccat attgatgacg tcacgcgt
708

```

<210> 1804

<211> 236

<212> PRT

<213> Homo sapiens

<400> 1804

```

Pro Thr Thr Met Ala Val Met Val Asp Gly Glu Val Pro Glu Glu Val
1          5          10          15
Thr Pro Lys Asp Leu Ile Leu Ala Leu Ile Ser Glu Ile Gly Thr Gly
          20          25          30
Gly Gly Gln Gly His Met Val Glu Tyr Arg Gly Glu Ala Ile Glu Lys

```

		35				40				45					
Met	Ser	Met	Glu	Gly	Arg	Met	Thr	Ile	Cys	Asn	Met	Ser	Ile	Glu	Trp
	50					55					60				
Gly	Ala	Arg	Val	Gly	Met	Val	Ala	Ser	Asp	Glu	Thr	Thr	Phe	Thr	Tyr
65					70					75					80
Leu	Lys	Asp	Arg	Pro	His	Ala	Pro	Arg	Gly	Ala	Gln	Trp	Asp	Lys	Ala
				85					90					95	
Val	Ala	Tyr	Trp	Arg	Thr	Leu	Arg	Thr	Asp	Asp	Asp	Ala	Thr	Phe	Asp
			100					105					110		
Ala	Glu	Ile	His	Val	Asp	Ala	Ser	Asn	Leu	Ala	Pro	Phe	Val	Thr	Trp
		115					120					125			
Gly	Thr	Asn	Pro	Gly	Gln	Gly	Ser	Pro	Leu	Gly	Gly	Val	Val	Pro	Ala
	130					135					140				
Val	Glu	Asp	Phe	Glu	Asp	Glu	Val	Ala	Arg	Ser	Ala	Ala	Phe	Gly	Val
145					150					155					160
His	Gly	Phe	Asp	Pro	Asp	Glu	Ile	Gly	Ser	Arg	Phe	Ala	Asp	Ile	Phe
				165				170						175	
Arg	Asn	Asn	Ser	Ala	Asn	Asn	Gly	Leu	Leu	Leu	Ala	Gln	Val	Asp	Pro
		180					185						190		
Lys	Val	Val	Gly	Glu	Leu	Trp	Asp	Phe	Ala	Glu	Gln	His	Pro	Gly	Glu
	195					200					205				
Gln	Leu	Thr	Leu	Ser	Leu	Glu	Asn	Arg	Thr	Ile	Asn	Leu	Pro	Gly	Arg
	210					215					220				
Thr	Thr	Tyr	Pro	Phe	His	Ile	Asp	Asp	Val	Thr	Arg				
225					230					235					

&lt;210&gt; 1805

&lt;211&gt; 833

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1805

nccgcagtggtgtgtgggacaa gaacaccgggt gagccgggttt ataacgccat cgtgtggcag  
60

gacacgcgca ctcaaaagat ctgtaacgaa ctagctggtg acaagggcgc cgaccgctac  
120

aaggagatct gtggtctggg cctgtcgacc tatttctctg gccgaagggt caaatggatt  
180

ctcgacaacg ttgaggagc ccgtgagagg gccgaggccg gcgatctgct cttcggtaac  
240

atggacactt ggggtctgtg gaacctgact ggcgggtacta acggtggcgt gcacatcacc  
300

gatccgacca acgcgtcccg aaccatgctc atggacgtcc gaaagctgca gtgggacgac  
360

tcgatgtgag aggtcatggg aattccaaag tccatgcttc ctgagatcaa gtctctctcc  
420

gagatctacg gctatgggtc caagaacggc ctgctgatcg ataccccgat ctccggcatt  
480

cttggcgatc agcaggccgc cacctttggc caggcttgct tccaaaaggg catggcgaag  
540

aacacgtacg gcaccgggtg cttcatgctc atgaacacag gtgaggaggc catcttctcc  
600

gagaacggtc tgctgaccac cgtctgctac aagattggtg accagccac cgtctatgcc  
660

ctggaagggtt cgategccgt cgctggatcg ctggtacagt ggctgcgcga caacctcaag  
 720  
 atgttcgaga ccgccccgca aatcgaagcc ctcgccaaca ccgtcgagga caatggtggc  
 780  
 gcctactttg tgccggcctt ctctggcctg ttcgcgccgt actggcgtcc gga  
 833

<210> 1806  
 <211> 277  
 <212> PRT  
 <213> Homo sapiens

<400> 1806  
 Xaa Ala Val Val Trp Asp Lys Asn Thr Gly Glu Pro Val Tyr Asn Ala  
 1 5 10 15  
 Ile Val Trp Gln Asp Thr Arg Thr Gln Lys Ile Cys Asn Glu Leu Ala  
 20 25 30  
 Gly Asp Lys Gly Ala Asp Arg Tyr Lys Glu Ile Cys Gly Leu Gly Leu  
 35 40 45  
 Ser Thr Tyr Phe Ser Gly Pro Lys Val Lys Trp Ile Leu Asp Asn Val  
 50 55 60  
 Glu Gly Ala Arg Ala Arg Ala Glu Ala Gly Asp Leu Leu Phe Gly Asn  
 65 70 75 80  
 Met Asp Thr Trp Val Leu Trp Asn Leu Thr Gly Gly Thr Asn Gly Gly  
 85 90 95  
 Val His Ile Thr Asp Pro Thr Asn Ala Ser Arg Thr Met Leu Met Asp  
 100 105 110  
 Val Arg Lys Leu Gln Trp Asp Asp Ser Met Cys Glu Val Met Gly Ile  
 115 120 125  
 Pro Lys Ser Met Leu Pro Glu Ile Lys Ser Ser Ser Glu Ile Tyr Gly  
 130 135 140  
 Tyr Gly Arg Lys Asn Gly Leu Leu Ile Asp Thr Pro Ile Ser Gly Ile  
 145 150 155 160  
 Leu Gly Asp Gln Gln Ala Ala Thr Phe Gly Gln Ala Cys Phe Gln Lys  
 165 170 175  
 Gly Met Ala Lys Asn Thr Tyr Gly Thr Gly Cys Phe Met Leu Met Asn  
 180 185 190  
 Thr Gly Glu Glu Ala Ile Phe Ser Glu Asn Gly Leu Leu Thr Thr Val  
 195 200 205  
 Cys Tyr Lys Ile Gly Asp Gln Pro Thr Val Tyr Ala Leu Glu Gly Ser  
 210 215 220  
 Ile Ala Val Ala Gly Ser Leu Val Gln Trp Leu Arg Asp Asn Leu Lys  
 225 230 235 240  
 Met Phe Glu Thr Ala Pro Gln Ile Glu Ala Leu Ala Asn Thr Val Glu  
 245 250 255  
 Asp Asn Gly Gly Ala Tyr Phe Val Pro Ala Phe Ser Gly Leu Phe Ala  
 260 265 270  
 Pro Tyr Trp Arg Pro  
 275

<210> 1807  
 <211> 420  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1807

```

nnntatcggc aaggtggtcg aaatggctct tgactatgtc aacggtgaca cgtgcgccgc
60
gaccgccccca ttcatttgtc gtttgacgtc gacgcgatgg accctagcgt ggccccgagc
120
acaggcacac cggtgcggtg tggcttcaca ttccgagaag gccactacat atgcgaggcg
180
gtagctgaga ccggctcggt ggtggctatg gatatggtag aagtcaaccc ccatcttgaa
240
aagcatgcgg ctgagcagac gatcgccgtg ggttggtccc tcattcggtc ggcgctgggg
300
gagacgcttc tgtaatgggt gcatgatggg ccggtgggtcc atagccatgc atagacactc
360
cgggcgctga tatgatgagt gacatagcac gtacgataaa tctcggtttt gagcacgcgt
420

```

&lt;210&gt; 1808

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1808

```

His Val Arg Arg Asp Arg Pro Ile His Leu Ser Phe Asp Val Asp Ala
1      5      10      15
Met Asp Pro Ser Val Ala Pro Ser Thr Gly Thr Pro Val Arg Gly Gly
20     25     30
Leu Thr Phe Arg Glu Gly His Tyr Ile Cys Glu Ala Val Ala Glu Thr
35     40     45
Gly Ser Leu Val Ala Met Asp Met Val Glu Val Asn Pro His Leu Glu
50     55     60
Lys His Ala Ala Glu Gln Thr Ile Ala Val Gly Cys Ser Leu Ile Arg
65     70     75     80
Ser Ala Leu Gly Glu Thr Leu Leu
85

```

&lt;210&gt; 1809

&lt;211&gt; 340

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1809

```

nnaccggtga tcgcatcggg gagcctcggc gcgatgcgcg tgttcgacct tcgccatcgc
60
cagaccggtg tcacgcatgc gtatgcctc gggcatggca gcctcctcgt gatgcggggc
120
cccaccagg ccgaatggca gcatcgctg ccgaaagcgc cgggtgtgca gggcgagcgc
180
gtgaacctga cgtttcggcg cgtgatgccg gtcggtatgg gccggtaaca accggcgctc
240
ccgaggtgcc cggatcgccg ggcgattcgc gccccgtttt cgcgattcat gcgcgatcga
300
tacgggcagg cggtcgcatg tgcggcacgt tgccgcacgn
340

```

<210> 1810  
 <211> 75  
 <212> PRT  
 <213> Homo sapiens

<400> 1810  
 Xaa Pro Val Ile Ala Ser Val Ser Leu Gly Ala Met Arg Val Phe Asp  
 1 5 10 15  
 Leu Arg His Arg Gln Thr Gly Val Thr His Ala Tyr Arg Leu Gly His  
 20 25 30  
 Gly Ser Leu Leu Val Met Arg Gly Pro Thr Gln Ala Glu Trp Gln His  
 35 40 45  
 Arg Val Pro Lys Ala Pro Gly Val Gln Gly Glu Arg Val Asn Leu Thr  
 50 55 60  
 Phe Arg Arg Val Met Pro Val Gly Met Gly Arg  
 65 70 75

<210> 1811  
 <211> 500  
 <212> DNA  
 <213> Homo sapiens

<400> 1811  
 nnacgcgtgc taggaatagc catggactca tcatcagata catgctggat ttataacttca  
 60  
 ctgggtggat tgtatgagct gctcgtaaaa gatgaggctc gcgatatgtg gcatttgttg  
 120  
 ctgaaacggt gcgactttga gaaggcacta acattttgtc gtgatgagac gtgtcggaag  
 180  
 caggtactgg aaaagaaggg cgatgcactg ctacacgcag gtcagctcat ggaggccgctc  
 240  
 gagtgtatg ctcaggccca gacaccggcc tttgaacagg ttgtgctttc tttgatggac  
 300  
 gtctgtgccg acaaggcatt gcgtcgatat gtcagactgc gtctcgacaa gatgccgaaa  
 360  
 caagctcgcg tgctcgtct catgctggct acttggctca ttgaattgta tgtggccgcc  
 420  
 attcaagcgc atgaaccac ctccgaacat tatcagacac ttttgctgga agcccaggag  
 480  
 acacttgagc ggcacatga  
 500

<210> 1812  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1812  
 Xaa Arg Val Leu Gly Ile Ala Met Asp Ser Ser Ser Asp Thr Cys Trp  
 1 5 10 15  
 Ile Tyr Thr Ser Leu Gly Gly Leu Tyr Glu Leu Leu Val Lys Asp Glu  
 20 25 30  
 Ala Arg Asp Met Trp His Leu Leu Leu Lys Arg Cys Asp Phe Glu Lys

```

      35              40              45
Ala Leu Thr Phe Cys Arg Asp Glu Thr Cys Arg Lys Gln Val Leu Glu
      50              55              60
Lys Lys Gly Asp Ala Leu Leu His Ala Gly Gln Leu Met Glu Ala Val
      65              70              75              80
Glu Cys Tyr Ala Gln Ala Gln Thr Pro Ala Phe Glu Gln Val Val Leu
      85              90              95
Ser Leu Met Asp Val Cys Ala Asp Lys Ala Leu Arg Arg Tyr Val Arg
      100             105             110
Leu Arg Leu Asp Lys Met Pro Lys Gln Ala Arg Val Pro Arg Leu Met
      115             120             125
Leu Ala Thr Trp Leu Ile Glu Leu Tyr Val Ala Ala Ile Gln Ala His
      130             135             140
Glu Pro Thr Ser Glu His Tyr Gln Thr Leu Leu Leu Glu Ala Gln Glu
      145             150             155             160
Thr Leu Glu Arg His His
      165

```

<210> 1813  
 <211> 426  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1813
tctagagccg ttgtgatcgg tatccatggt tggatggggg tcatctcgat ggaggagtgt
60
gtcctgaggg gtggcagtga cctggtaggg gtgcctgcgg cgtcgcggct tgcgatcgct
120
ggttctcggg gatgactctc ggatgaatat agatctgcta agacgtcatt agattcgctt
180
ggcgcttggt tgggaacggg tgtgaagcag ccttctgatg gatgtatattt tgcgttggtg
240
aataaggttt caatattaat tgaatatggc gctagatgct ggtttaggat cagttgacgt
300
ccgctgtaga tcctccctat ggtcattctg gggccaggcg cttcgccagc tggccatcgc
360
aacaatggtg tggcgaaggg ttatgaggtg agtatggctg agcaagtcgt tggacaggcg
420
tctaca
426

```

<210> 1814  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1814
Met Thr Ile Gly Arg Ile Tyr Ser Gly Arg Gln Leu Ile Leu Asn Gln
1      5      10      15
His Leu Ala Pro Tyr Ser Ile Asn Ile Glu Thr Leu Phe Asn Asn Ala
20     25     30
Lys Ile His Pro Ser Glu Gly Cys Phe Thr Pro Val Pro Asn Gln Ala
35     40     45
Pro Ser Glu Ser Asn Asp Val Leu Ala Asp Leu Tyr Ser Ser Glu Ser

```



```

      50              55              60
His Pro Arg Glu Pro Ala Ile Ala Ser Arg Asp Ala Ala Gly Thr Pro
65              70              75              80
Thr Arg Ser Leu Pro Pro Leu Arg Thr His Ser Ser Ile Glu Met Asn
      85              90              95
Pro Ile Gln Pro Trp Ile Pro Ile Thr Thr Ala Leu
      100              105

```

<210> 1815  
 <211> 303  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1815
ggcgccccaca tggctacgct cgcaccgcgg cacaaggtaa gccgtagcgg cgggatcgag
60
cgccaggccg cgcattctcg catggagcgc gatcagttcg gccatcatcg cgtcgctcggg
120
cgtgccgata tcgaggggca acgccgcgcc gagccgcgaa gccagatcgg gcagcgcgat
180
ccgccagcca tcggcaaatt cgcgagtgat gacgagcaag ggccgcctgg tctcctgcgc
240
ccggttccag cagtggaaca cgttcgctc gggcagacgg gcggcatcgg cgatcacggt
300
acc
303

```

<210> 1816  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1816
Met Ala Thr Leu Ala Pro Arg His Lys Val Ser Arg Ser Gly Gly Ile
1              5              10              15
Glu Arg Gln Ala Ala His Leu Gly Met Glu Arg Asp Gln Phe Gly His
      20              25              30
His Arg Val Val Gly Arg Ala Asp Leu Glu Gly Gln Arg Arg Ala Glu
      35              40              45
Pro Arg Ser Gln Ile Gly Gln Arg Asp Pro Pro Ala Ile Gly Lys Phe
      50              55              60
Ala Ser Asp Asp Glu Gln Gly Pro Pro Gly Leu Leu Arg Pro Val Pro
65              70              75              80
Ala Val Glu His Val Arg Leu Gly Gln Thr Gly Gly Ile Gly Asp His
      85              90              95
Gly Thr

```

<210> 1817  
 <211> 413  
 <212> DNA  
 <213> Homo sapiens

<400> 1817

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 60  
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 120  
 ccgcgctcct tatttcacat gctgcatctg cgatggccat tcgcagcagt tttttctctt  
 180  
 gtgatgcagg tcgtggtagc agcgtatgga tcgtcactcg cacgccactt gccgcatgtg  
 240  
 tacagggcgt gacgcatgtc ccgtcaaact cgctcccaga cgtgtttgtt attgaccaac  
 300  
 ttccagcagc gataccccta atcaaactcc tgtgtgggcg gcgtgtcatg tactactgtc  
 360  
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 413

<210> 1818

<211> 83

<212> PRT

<213> Homo sapiens

<400> 1818

Xaa	Ser	Leu	Gln	Asp	Arg	Gly	His	Thr	Val	Tyr	Ile	Leu	Thr	Ser	His
1				5					10					15	
Phe	Asp	Ala	Ser	His	Ala	Phe	Glu	Pro	Thr	Arg	Asp	Gly	Thr	Leu	Gln
			20					25					30		
Val	Ile	His	Ala	Lys	Thr	Trp	Ile	Pro	Arg	Ser	Leu	Phe	His	Met	Leu
		35					40					45			
His	Leu	Arg	Trp	Pro	Phe	Ala	Ala	Val	Phe	Ser	Leu	Val	Met	Gln	Val
	50					55					60				
Val	Val	Ala	Ala	Tyr	Gly	Ser	Ser	Leu	Ala	Arg	His	Leu	Pro	His	Val
65					70					75				80	
Tyr	Arg	Ala													

<210> 1819

<211> 343

<212> DNA

<213> Homo sapiens

<400> 1819

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 60  
 atcacaagac agataggcct tggcatgac caacagatga acactgtttg ccctgaatgc  
 120  
 aaaggatcag gtgagatcat aagtgacaag gacaaatgcc caagctgtaa aggaaacaaa  
 180  
 gtagtccagg agaagaaggt gttagaggtt catgtggaga aaggaatgca acataaccaa  
 240  
 aagattgtat tccaggggtc ggctgatgaa gctcctgata cgggtacagg agacatttgt  
 300  
 tttgtcttgc aacttaaaga ccatccaaaa ttttaagagga tgt  
 343

<210> 1820

<211> 114  
 <212> PRT  
 <213> Homo sapiens

<400> 1820

Gly	Ser	Lys	Ser	Gly	Ala	Ser	Gly	Thr	Cys	His	Gly	Cys	Arg	Gly	Ala
1				5					10					15	
Gly	Met	Arg	Thr	Ile	Thr	Arg	Gln	Ile	Gly	Leu	Gly	Met	Ile	Gln	Gln
			20					25					30		
Met	Asn	Thr	Val	Cys	Pro	Glu	Cys	Lys	Gly	Ser	Gly	Glu	Ile	Ile	Ser
		35					40					45			
Asp	Lys	Asp	Lys	Cys	Pro	Ser	Cys	Lys	Gly	Asn	Lys	Val	Val	Gln	Glu
	50					55				60					
Lys	Lys	Val	Leu	Glu	Val	His	Val	Glu	Lys	Gly	Met	Gln	His	Asn	Gln
65					70					75				80	
Lys	Ile	Val	Phe	Gln	Gly	Gln	Ala	Asp	Glu	Ala	Pro	Asp	Thr	Gly	Thr
			85					90						95	
Gly	Asp	Ile	Val	Phe	Val	Leu	Gln	Leu	Lys	Asp	His	Pro	Lys	Phe	Lys
			100					105						110	

Arg Met

<210> 1821  
 <211> 285  
 <212> DNA  
 <213> Homo sapiens

<400> 1821

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 60  
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 120  
 gcccgggaaa agttgctcgc caaggaggcc gccccagcga tgacctagat tgtctactgc  
 180  
 tgtgtctgcc ctgtagtttg acggggaaga actgatgaac tcgtattgtg gttttccgaa  
 240  
 tctagtttca tatgtttctg tccaccagac catgtttaga agctt  
 285

<210> 1822  
 <211> 55  
 <212> PRT  
 <213> Homo sapiens

<400> 1822

Lys	Leu	Glu	Phe	Ser	Lys	Ile	Leu	Glu	Ala	Ile	Lys	Ala	Asn	Phe	Asn
1				5					10					15	
Asp	Lys	Phe	Asp	Glu	Val	Gly	Lys	Lys	Trp	Gly	Gly	Gly	Ile	Met	Gly
			20					25					30		
Ser	Lys	Ser	Gln	Ala	Lys	Thr	Lys	Ala	Arg	Glu	Lys	Leu	Leu	Ala	Lys
			35				40					45			
Glu	Ala	Ala	Gln	Arg	Met	Thr									
	50					55									

<210> 1823  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

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 60  
 tggggcgctgg tcgataagct ctgcatggcc aactatcagc aaaagcgcga tccggccccc  
 120  
 tgtgagcaga tttatatgcc gcagggtaaa gcgcagggtc ttagcgctgct gcaaaacccc  
 180  
 cgttatccct atcatttcat tctggtgccg acggcgccgc tttccggcat tgaaagcccc  
 240  
 ctgctgctgg cggagagcg aacggactat tttggctatg catggctgat gcgttacccg  
 300  
 ctggccgccg agtatggcgg gccggtgccg gacgacaggc tgggcatggc gatcaactcc  
 360  
 gcttacggcc gcagccagaa ccaattg  
 387

<210> 1824  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 1824  
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 Ser Asp Ala Leu Trp Gly Val Val Asp Lys Leu Cys Met Ala Asn Tyr  
 20 25 30  
 Gln Gln Lys Arg Asp Pro Ala Pro Cys Glu Gln Ile Tyr Met Pro Gln  
 35 40 45  
 Gly Lys Ala Gln Gly Phe Ser Val Leu Gln Asn Pro Arg Tyr Pro Tyr  
 50 55 60  
 His Phe Ile Leu Val Pro Thr Ala Pro Leu Ser Gly Ile Glu Ser Pro  
 65 70 75 80  
 Leu Leu Leu Ala Gly Glu Arg Thr Asp Tyr Phe Gly Tyr Ala Trp Leu  
 85 90 95  
 Met Arg Tyr Arg Leu Ala Ala Glu Tyr Gly Gly Pro Val Pro Asp Asp  
 100 105 110  
 Arg Leu Gly Met Ala Ile Asn Ser Ala Tyr Gly Arg Ser Gln Asn Gln  
 115 120 125  
 Leu

<210> 1825  
 <211> 413  
 <212> DNA  
 <213> Homo sapiens

<400> 1825  
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 60

tgcgtgcata ccgctgctct ggcaggctcgt gcgtgcgatt gtcgccgaca catcggcggc  
 120  
 ttggcacgtc gtgattgggc gcctaggcac catgtcgcag gccgacatgg acatgtgggc  
 180  
 gtcgtgcctc gatacgcgcg acccttcctg ctctcggtgg gccttgtgtg cctggagcgc  
 240  
 gatgcctggc ctacgggcac gcgatgcac ggtggtctac ctgtcggaca tgccgctggg  
 300  
 tctggcctca ggtgcgtggc cgatccgctg gcctcgctcg gcgttatgtg tctgccggcg  
 360  
 cctatgcat tcatctcgtg cagctacgtc acctggctga tctcgacgcg gct  
 413

<210> 1826

<211> 124

<212> PRT

<213> Homo sapiens

<400> 1826

Met	Gly	Arg	Arg	Arg	Cys	Val	Cys	Val	His	Thr	Ala	Ala	Leu	Ala	Gly
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Arg	Ala	Cys	Asp	Cys	Arg	Arg	His	Ile	Gly	Gly	Leu	Ala	Arg	Arg	Asp
			20					25					30		
Trp	Ala	Pro	Arg	His	His	Val	Ala	Gly	Arg	His	Gly	His	Val	Gly	Val
			35				40					45			
Val	Pro	Arg	Tyr	Ala	Arg	Pro	Phe	Leu	Leu	Ser	Val	Gly	Leu	Val	Cys
			50				55				60				
Leu	Glu	Arg	Asp	Ala	Trp	Pro	Thr	Gly	Thr	Arg	Cys	Ile	Gly	Gly	Leu
65					70				75					80	
Pro	Val	Gly	His	Ala	Ala	Gly	Ser	Gly	Leu	Arg	Cys	Val	Ala	Asp	Pro
			85					90					95		
Arg	Ala	Ser	Leu	Gly	Val	Met	Cys	Leu	Pro	Ala	Pro	Met	Pro	Phe	Ile
			100					105					110		
Ser	Cys	Ser	Tyr	Val	Thr	Trp	Leu	Ile	Ser	Thr	Arg				
			115				120								

<210> 1827

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1827

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 120  
 gcctacctgc aggccgaagc gcagggcaag gccaaaccgca cgatctctgc ccgcaagctg  
 180  
 tacgcccgca tgatgcgtac gctggccgag accggcaacg gctggatgac cttcaaggac  
 240  
 aagtgaacc gcgccagcaa ccagaccctg cgtccgggca acgtgatcca cctgtccaac  
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 ctgtgcaccg aaatcctgga agtcacttcc aacgatgaaa ccgcg  
 345

<210> 1828  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 1828  
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 Gln Glu Trp Ser Leu Phe Asp Pro Arg Val Val Pro Glu Phe Thr Asp  
 20 25 30  
 Leu Phe Gly Glu Ala Phe Glu Ala Ala Tyr Leu Gln Ala Glu Ala Gln  
 35 40 45  
 Gly Lys Ala Asn Arg Thr Ile Ser Ala Arg Lys Leu Tyr Ala Arg Met  
 50 55 60  
 Met Arg Thr Leu Ala Glu Thr Gly Asn Gly Trp Met Thr Phe Lys Asp  
 65 70 75 80  
 Lys Cys Asn Arg Ala Ser Asn Gln Thr Leu Arg Pro Gly Asn Val Ile  
 85 90 95  
 His Leu Ser Asn Leu Cys Thr Glu Ile Leu Glu Val Thr Ser Asn Asp  
 100 105 110  
 Glu Thr Ala  
 115

<210> 1829  
 <211> 4457  
 <212> DNA  
 <213> Homo sapiens

<400> 1829  
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 240  
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 300  
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 360  
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 420  
 gcaaatggaa tctccaggaa tagctcctca ccttgtattt caggaaccac acacactctt  
 480  
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 600  
 gagtcaggta aacaaccagg agcaaaacct aaagtaaac ttgccagaaa aaaggatgat  
 660  
 gacaagaaaa aatcttcaaa tgaaaaactc aaacaaacca gtgtattctt cagtgatggg  
 720

ctggatttag agaactggta tagctgtgga gagggagaca tttctgaaat tgagagtgc  
780  
atgggttctc caggatctcg aaaatctccc aatttcaaca ttcactctct ctatcaacat  
840  
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900  
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960  
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1920  
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1980  
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 4440  
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 4457

<210> 1830

<211> 1377

<212> PRT

<213> Homo sapiens

<400> 1830

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Ile	Leu	Gln	Ser	Ser	Asp	Ser	Gly	Cys	Ser	Gln	Ser	Ser	Ala	Gly	Asp
		20						25					30		
Asn	Leu	Ser	Tyr	Glu	Val	Asp	Pro	Glu	Thr	Val	Asn	Ala	Gln	Glu	Asp
	35						40					45			
Ser	Gln	Met	Pro	Lys	Glu	Ser	Ser	Pro	Asp	Asp	Asp	Val	Gln	Gln	Val
	50					55					60				
Val	Phe	Asp	Leu	Ile	Cys	Lys	Val	Val	Ser	Gly	Leu	Glu	Val	Glu	Ser
65					70				75						80
Ala	Ser	Val	Thr	Ser	Gln	Leu	Glu	Ile	Glu	Ala	Met	Pro	Pro	Lys	Cys
			85					90						95	
Ser	Asp	Ile	Asp	Pro	Asp	Glu	Glu	Thr	Ile	Lys	Ile	Glu	Asp	Asp	Ser
	100							105					110		
Ile	Arg	Gln	Ser	Gln	Asn	Ala	Leu	Ser	Asn	Glu	Ser	Ser	Gln	Phe	
	115					120						125			
Leu	Ser	Val	Ser	Ala	Glu	Gly	Gly	His	Glu	Cys	Val	Ala	Asn	Gly	Ile
	130					135					140				
Ser	Arg	Asn	Ser	Ser	Ser	Pro	Cys	Ile	Ser	Gly	Thr	Thr	His	Thr	Leu
145					150					155					160
His	Asp	Ser	Ser	Val	Ala	Ser	Ile	Glu	Thr	Lys	Ser	Arg	Gln	Arg	Ser
			165						170					175	
His	Ser	Ser	Ile	Gln	Phe	Ser	Phe	Lys	Glu	Lys	Leu	Ser	Glu	Lys	Val
		180						185					190		
Ser	Glu	Lys	Glu	Thr	Ile	Val	Lys	Glu	Ser	Gly	Lys	Gln	Pro	Gly	Ala
	195					200						205			
Lys	Pro	Lys	Val	Lys	Leu	Ala	Arg	Lys	Lys	Asp	Asp	Lys	Lys	Lys	
	210					215					220				
Ser	Ser	Asn	Glu	Lys	Leu	Lys	Gln	Thr	Ser	Val	Phe	Phe	Ser	Asp	Gly

225					230					235					240
Leu	Asp	Leu	Glu	Asn	Trp	Tyr	Ser	Cys	Gly	Glu	Gly	Asp	Ile	Ser	Glu
				245					250					255	
Ile	Glu	Ser	Asp	Met	Gly	Ser	Pro	Gly	Ser	Arg	Lys	Ser	Pro	Asn	Phe
			260					265					270		
Asn	Ile	His	Pro	Leu	Tyr	Gln	His	Val	Leu	Leu	Tyr	Leu	Gln	Leu	Tyr
		275					280					285			
Asp	Ser	Ser	Arg	Thr	Leu	Tyr	Ala	Phe	Ser	Ala	Ile	Lys	Ala	Ile	Leu
	290					295					300				
Lys	Thr	Asn	Pro	Ile	Ala	Phe	Val	Asn	Ala	Ile	Ser	Thr	Thr	Ser	Val
305					310					315					320
Asn	Asn	Ala	Tyr	Thr	Pro	Gln	Leu	Ser	Leu	Leu	Gln	Asn	Leu	Leu	Ala
				325					330					335	
Arg	His	Arg	Ile	Ser	Val	Met	Gly	Lys	Asp	Phe	Tyr	Ser	His	Ile	Pro
			340					345					350		
Val	Asp	Ser	Asn	His	Asn	Phe	Arg	Ser	Ser	Met	Tyr	Ile	Glu	Ile	Leu
	355						360					365			
Ile	Ser	Leu	Cys	Leu	Tyr	Tyr	Met	Arg	Ser	His	Tyr	Pro	Thr	His	Val
	370					375					380				
Lys	Val	Thr	Ala	Gln	Asp	Leu	Ile	Gly	Asn	Arg	Asn	Met	Gln	Met	Met
385					390					395					400
Ser	Ile	Glu	Ile	Leu	Thr	Leu	Leu	Phe	Thr	Glu	Leu	Ala	Lys	Val	Ile
				405					410					415	
Glu	Ser	Ser	Ala	Lys	Gly	Phe	Pro	Ser	Phe	Ile	Ser	Asp	Met	Leu	Ser
			420					425				430			
Lys	Cys	Lys	Val	Gln	Lys	Val	Ile	Leu	His	Cys	Leu	Leu	Ser	Ser	Ile
	435						440				445				
Phe	Ser	Ala	Gln	Lys	Trp	His	Ser	Glu	Lys	Met	Ala	Gly	Lys	Asn	Leu
	450					455				460					
Val	Ala	Val	Glu	Glu	Gly	Phe	Ser	Glu	Asp	Ser	Leu	Ile	Asn	Phe	Ser
465					470				475						480
Glu	Asp	Glu	Phe	Asp	Asn	Gly	Ser	Thr	Leu	Gln	Ser	Gln	Leu	Leu	Lys
				485					490					495	
Val	Leu	Gln	Arg	Leu	Ile	Val	Leu	Glu	His	Arg	Val	Met	Thr	Ile	Pro
		500						505					510		
Glu	Glu	Asn	Glu	Thr	Gly	Phe	Asp	Phe	Val	Val	Ser	Asp	Leu	Glu	His
	515						520					525			
Ile	Ser	Pro	His	Gln	Pro	Met	Thr	Ser	Leu	Gln	Tyr	Leu	His	Ala	Gln
	530					535					540				
Pro	Ile	Thr	Cys	Gln	Gly	Met	Phe	Leu	Cys	Ala	Val	Ile	Arg	Ala	Leu
545					550					555					560
His	Gln	His	Cys	Ala	Cys	Lys	Met	His	Pro	Gln	Trp	Ile	Gly	Leu	Ile
			565						570					575	
Thr	Ser	Thr	Leu	Pro	Tyr	Met	Gly	Lys	Val	Leu	Gln	Arg	Val	Val	Val
			580					585					590		
Ser	Val	Thr	Leu	Gln	Leu	Cys	Arg	Asn	Leu	Asp	Asn	Leu	Ile	Gln	Gln
	595						600				605				
Tyr	Lys	Tyr	Glu	Thr	Gly	Leu	Ser	Asp	Ser	Arg	Pro	Leu	Trp	Met	Ala
	610					615				620					
Ser	Ile	Ile	Pro	Pro	Asp	Met	Ile	Leu	Thr	Leu	Glu	Gly	Ile	Thr	
625					630					635					640
Ala	Ile	Ile	His	Tyr	Cys	Leu	Leu	Asp	Pro	Thr	Thr	Gln	Tyr	His	Gln
			645					650					655		
Leu	Leu	Val	Ser	Val	Asp	Gln	Lys	His	Leu	Phe	Glu	Ala	Arg	Ser	Gly

1419

1090 1095 1100  
 Tyr Gln Lys Tyr Leu Pro Asp Ile Gln Glu Arg Leu Val Glu Ser Leu  
 1105 1110 1115 1120  
 Arg Leu Pro Gln Val Pro Thr Leu His Ser Gln Val Phe Leu Phe Phe  
 1125 1130 1135  
 Arg Val Leu Leu Leu Arg Met Ser Pro Gln His Leu Thr Ser Leu Trp  
 1140 1145 1150  
 Pro Thr Met Ile Thr Glu Leu Val Gln Val Phe Leu Leu Met Glu Gln  
 1155 1160 1165  
 Glu Leu Thr Ala Asp Glu Asp Ile Ser Arg Thr Ser Gly Pro Ser Val  
 1170 1175 1180  
 Ala Gly Leu Glu Thr Thr Tyr Thr Gly Gly Asn Gly Phe Ser Thr Ser  
 1185 1190 1195 1200  
 Tyr Asn Ser Gln Arg Trp Leu Asn Leu Tyr Leu Ser Ala Cys Lys Phe  
 1205 1210 1215  
 Leu Asp Leu Ala Leu Ala Leu Pro Ser Glu Asn Leu Pro Gln Phe Gln  
 1220 1225 1230  
 Met Tyr Arg Trp Ala Phe Ile Pro Glu Ala Ser Asp Asp Ser Gly Leu  
 1235 1240 1245  
 Glu Val Arg Arg Gln Gly Ile His Gln Arg Glu Phe Lys Pro Tyr Val  
 1250 1255 1260  
 Val Arg Leu Ala Lys Leu Leu Arg Lys Arg Ala Lys Lys Asn Pro Glu  
 1265 1270 1275 1280  
 Glu Asp Asn Ser Gly Arg Thr Leu Gly Trp Glu Pro Gly His Leu Leu  
 1285 1290 1295  
 Leu Thr Ile Cys Thr Val Arg Ser Met Glu Gln Leu Leu Pro Phe Phe  
 1300 1305 1310  
 Asn Val Leu Ser Gln Val Phe Asn Ser Lys Val Thr Ser Arg Cys Gly  
 1315 1320 1325  
 Gly His Ser Gly Ser Pro Ile Leu Tyr Ser Asn Ala Phe Pro Asn Lys  
 1330 1335 1340  
 Asp Met Lys Leu Glu Asn His Lys Pro Cys Ser Ser Lys Ala Arg Gln  
 1345 1350 1355 1360  
 Lys Ile Glu Glu Met Val Glu Lys Asp Phe Leu Glu Gly Met Ile Lys  
 1365 1370 1375  
 Thr

&lt;210&gt; 1831

&lt;211&gt; 508

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1831

nntcatgaaa ggagaggccg tatgcccatt gtcaaactca gtgcgcagtt cgtgcgcgaa

60

gcggtttgcc cgcccggaaa atccaagggtg gactattacg acaacgcact caaagggttc

120

atcctggagg ctcgaccttc aggtggcaaa accttttacc tgcgctatca cgacagccac

180

ggcaagctgc gccaatgcaa gatcgggtgat gctgctgcgg tcagctacga caaggcccgg

240

cagaaggcca tgcggttgcg ttggaagggtg gaatgggggg gcaatccatt ggaggagcgc

300

caagccttgc gtgcggtacc gaccctggcc gagttcatcc gcgagaccta tgtgccgcac  
 360  
 atccacctgc accggaggaa ttttcagtcc acgctgagct tcctcaagtg ccatgtcctg  
 420  
 ccgcgctttg gagccaagca cctggacgaa atcacgacca acatgctggc cgaggctcac  
 480  
 caggatctgc gcacgaaggc ctacgcgt  
 508

<210> 1832

<211> 169

<212> PRT

<213> Homo sapiens

<400> 1832

Xaa	His	Glu	Arg	Arg	Gly	Arg	Met	Pro	Ile	Val	Lys	Leu	Ser	Ala	Gln
1				5				10						15	
Phe	Val	Arg	Glu	Ala	Val	Cys	Pro	Pro	Gly	Lys	Ser	Lys	Val	Asp	Tyr
		20					25						30		
Tyr	Asp	Asn	Ala	Leu	Lys	Gly	Phe	Ile	Leu	Glu	Ala	Arg	Pro	Ser	Gly
		35				40						45			
Gly	Lys	Thr	Phe	Tyr	Leu	Arg	Tyr	His	Asp	Ser	His	Gly	Lys	Leu	Arg
		50				55					60				
Gln	Cys	Lys	Ile	Gly	Asp	Ala	Ala	Ala	Val	Ser	Tyr	Asp	Lys	Ala	Arg
65					70					75				80	
Gln	Lys	Ala	Met	Arg	Leu	Arg	Trp	Lys	Val	Glu	Trp	Gly	Gly	Asn	Pro
			85						90					95	
Leu	Glu	Glu	Arg	Gln	Ala	Leu	Arg	Ala	Val	Pro	Thr	Leu	Ala	Glu	Phe
			100					105					110		
Ile	Arg	Glu	Thr	Tyr	Val	Pro	His	Ile	His	Leu	His	Arg	Arg	Asn	Phe
		115				120						125			
Gln	Ser	Thr	Leu	Ser	Phe	Leu	Lys	Cys	His	Val	Leu	Pro	Arg	Phe	Gly
		130				135					140				
Ala	Lys	His	Leu	Asp	Glu	Ile	Thr	Thr	Asn	Met	Leu	Ala	Glu	Ala	His
145					150					155				160	
Gln	Asp	Leu	Arg	Thr	Lys	Gly	Tyr	Ala							
					165										

<210> 1833

<211> 430

<212> DNA

<213> Homo sapiens

<400> 1833

acgcgtgcga tgttgaagga gcgcttcggc atcgggcatg cgacgctgca ggttgaactg  
 60  
 tccggtgccg aggcagacga tgccgaggcg ggcggctgct aagggtcgcc gtcgttcagt  
 120  
 ggcgcaaagc ggcgatgac gcgtcgaaca gcgttactcc agccagcggg ccaaccaaca  
 180  
 gcatcaccag gttgaaaccg atgatccacg ccgcgatgct ttctcggcgc gggtttggca  
 240  
 gcggcttggg ctcggcttcc cagcgttccg gcggcggcca gccattttgg aaatcgacga  
 300

acatctccgg cgctcctgct gtcaggcgct gaaggatcg aaagtcatgc gccgtgacaa  
 360  
 aggaagatcg gcgacacagg agccgaagcg ccgccgcctg caataagcgc gcgcgatcgc  
 420  
 aattgtcggg  
 430

<210> 1834

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1834

Met	Arg	Arg	Cys	Arg	Leu	Asn	Cys	Pro	Val	Pro	Arg	Gln	Thr	Met	Pro
1			5					10					15		
Arg	Arg	Ala	Ala	Ala	Lys	Gly	Arg	Arg	Arg	Ser	Val	Ala	Gln	Ser	Gly
		20					25					30			
Asp	Asp	Arg	Val	Glu	Gln	Arg	Tyr	Ser	Ser	Gln	Arg	Ala	Asn	Gln	Gln
		35				40					45				
His	His	Gln	Val	Glu	Thr	Asp	Asp	Pro	Arg	Arg	Asp	Ala	Phe	Ser	Ala
		50				55					60				
Arg	Val	Trp	Gln	Arg	Leu	Gly	Leu	Gly	Phe	Pro	Ala	Phe	Arg	Arg	Arg
65					70				75					80	
Pro	Ala	Ile	Leu	Glu	Ile	Asp	Glu	His	Leu	Arg	Arg	Ser	Cys	Cys	Gln
			85					90					95		
Ala	Leu	Lys	Val	Ser	Lys	Val	Met	Arg	Arg	Asp	Lys	Gly	Arg	Ser	Ala
			100					105					110		
Thr	Gln	Glu	Pro	Lys	Arg	Arg	Arg	Leu	Gln						
		115					120								

<210> 1835

<211> 677

<212> DNA

<213> Homo sapiens

<400> 1835

natactcaag gactttgacg gcacccgagc ccggttgctc cctgaggcca tcatgaaccc  
 60  
 cccagtggca ccctatgcta ctgtggcacc cagcacttta gcccaccccc aggcccaggc  
 120  
 tctggcccg cagcaggccc tgcagcatgc acagaccctg gcccattgcc ctccccagac  
 180  
 gctgcagcac cctcagggtg tcccgccacc ccaggcactg tcccaccctc agagcctcca  
 240  
 gcagcctcag ggcttggggc accctcagcc catggcccaa acccaggggt tgggccaccc  
 300  
 tcaggccctg gctcaccagg gtctccagca cccccacaat cccttgctgc atggaggccg  
 360  
 gaagatgcca gactcagatg ccccccgaa tgtgaccgtg tctacctcaa ctatccccct  
 420  
 ttcaatggcg gccactctgc agcacagcca gcctccggac ctgagtagca tcgtgcacca  
 480  
 gatcaaccag ttttgccaga cgagggcagg catcagcact acctcagtgt gtgagggcca  
 540

gatcgccaac cccagcccca ttagtcgcag tctgctcatc aatgcaagca cccgggtgtc  
 600  
 gacccacagc gtccccacac caatgccttc atgtgtgggc aatcccatgg agcacaccca  
 660  
 cgcggccacc gccgcgg  
 677

<210> 1836  
 <211> 140  
 <212> PRT  
 <213> Homo sapiens

<400> 1836  
 Gly His His Glu Pro Pro Ser Gly Thr Leu Cys Tyr Cys Gly Thr Gln  
 1 5 10 15  
 His Phe Ser Pro Pro Pro Gly Pro Gly Ser Gly Pro Pro Ala Gly Pro  
 20 25 30  
 Ala Ala Cys Thr Asp Pro Gly Pro Cys Pro Ser Pro Asp Ala Ala Ala  
 35 40 45  
 Pro Ser Gly Tyr Pro Ala Thr Pro Gly Thr Val Pro Pro Ser Glu Pro  
 50 55 60  
 Pro Ala Ala Ser Gly Pro Gly Pro Pro Ser Ala His Gly Pro Asn Pro  
 65 70 75 80  
 Gly Leu Gly Pro Pro Ser Gly Pro Gly Ser Pro Gly Ser Pro Ala Pro  
 85 90 95  
 Pro Gln Ser Leu Ala Ala Trp Arg Pro Glu Asp Ala Arg Leu Arg Cys  
 100 105 110  
 Pro Pro Glu Cys Asp Arg Val Tyr Leu Asn Tyr Pro Pro Phe Asn Gly  
 115 120 125  
 Gly His Ser Ala Ala Gln Pro Ala Ser Gly Pro Glu  
 130 135 140

<210> 1837  
 <211> 564  
 <212> DNA  
 <213> Homo sapiens

<400> 1837  
 nntctagaac actctgcccc tgaatctgta cggggattgt ttggcccgtc acgaactcgt  
 60  
 acggtcgata tcaatatcac tgggttttct tcacagtatt taccgcccc ctatggacca  
 120  
 attgctgcgg acgtcaaaca aacctgggcg tgggaccac aggatctgac gattgtctca  
 180  
 acttctgctg atcacgacca taacctccga tatgcagtac agcatttcgg cgcaagcccg  
 240  
 accccgatcc agtaaccttc gataacgcga aagccggcac cccacataac tcggntgtac  
 300  
 accgaagtcc ctgccaacgt tccatccgac ataggggagt taactaacg aattatcaag  
 360  
 gggaaatcta cccccgtaac caaggccatc gcgattcaaa actggcttcg tgacagcgct  
 420  
 cgattccatt acgacatcaa cgcacccgaa ggtgacggct atcaggtact ggaaaacttc  
 480

ctgctgcaca cccaccgcgg ttattgcac catttcgcgg cgtcaatggc actcatggca  
 540  
 cgacttgaag gtattccgtc acgc  
 564

<210> 1838  
 <211> 84  
 <212> PRT  
 <213> Homo sapiens

<400> 1838  
 Xaa Leu Glu His Ser Ala Pro Glu Ser Val Pro Gly Leu Phe Gly Pro  
 1 5 10 15  
 Ser Arg Thr Arg Thr Val Asp Ile Asn Ile Thr Gly Phe Ser Ser Gln  
 20 25 30  
 Tyr Leu Pro Ala Pro Tyr Gly Pro Ile Ala Ala Asp Val Lys Gln Thr  
 35 40 45  
 Trp Ala Trp Asp Pro Gln Asp Leu Thr Ile Val Ser Thr Ser Ala Asp  
 50 55 60  
 His Asp His Asn Leu Arg Tyr Ala Val Gln His Phe Gly Ala Ser Pro  
 65 70 75 80  
 Thr Pro Ile Gln

<210> 1839  
 <211> 300  
 <212> DNA  
 <213> Homo sapiens

<400> 1839  
 ncaatacggc tgaacaccgc tgatatcacc cgtactttcc cgtcaacgg aaaattttcc  
 60  
 gaagttcagg caaaggctta tcaggcgggtg ctggacgctg cagatgcggc atttaaggca  
 120  
 gccgttcttg gcaataaatt ccgcgacgtc catgctgcag cgatgaatgt tctcgctctc  
 180  
 cgccttgagg actgggggct tatgccggtc agcgcgaagg tcgctctttc ggacgagggc  
 240  
 gggcaacacc gtcgttggat gccgcacggc accagccacc atctagggtt ggatgtgcac  
 300

<210> 1840  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 1840  
 Xaa Ile Arg Leu Asn Thr Ala Asp Ile Thr Arg Thr Phe Pro Val Asn  
 1 5 10 15  
 Gly Lys Phe Ser Glu Val Gln Ala Lys Ala Tyr Gln Ala Val Leu Asp  
 20 25 30  
 Ala Ala Asp Ala Ala Phe Lys Ala Ala Val Pro Gly Asn Lys Phe Arg  
 35 40 45  
 Asp Val His Ala Ala Ala Met Asn Val Leu Ala Ser Arg Leu Glu Asp



50		55		60
Trp Gly Leu Met Pro Val Ser Ala Lys Val Ala Leu Ser Asp Glu Gly				
65		70		75
Gly Gln His Arg Arg Trp Met Pro His Gly Thr Ser His His Leu Gly				80
	85		90	95
Leu Asp Val His				
100				

<210> 1841  
 <211> 330  
 <212> DNA  
 <213> Homo sapiens

<400> 1841  
 nnctccaaga acgtcccgga gtggggcccc agggcgctcg aactccccgg cgggcccggg  
 60  
 gtcgatccgg tggtcgagat cggcgggtccc ggtacgctag cccaatcgat ggtcgccccg  
 120  
 cgcgtcggcg cccatgtcgc cttgatcggc gtgcttnacg gggattgtcg ggcgggtgagg  
 180  
 acggcgctgc tgatgagcaa gaatctgcgc gtgcaagggc tgccgggtcgg cagccgcgcg  
 240  
 cagcaactcg cgatgatcgc ggggggtcgag gogaacggca tccgtccgat cctcgaccag  
 300  
 catttcccgc tcgaaaatct ccccgacgcg  
 330

<210> 1842  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 1842
Xaa Ser Lys Asn Val Pro Glu Trp Gly Pro Arg Ala Leu Glu Leu Pro
1 5 10 15
Gly Gly Pro Gly Val Asp Pro Val Val Glu Ile Gly Gly Pro Gly Thr
20 25 30
Leu Ala Gln Ser Met Val Ala Pro Arg Val Gly Ala His Val Ala Leu
35 40 45
Ile Gly Val Leu Xaa Gly Asp Cys Arg Ala Val Arg Thr Ala Leu Leu
50 55 60
Met Ser Lys Asn Leu Arg Val Gln Gly Leu Pro Val Gly Ser Arg Ala
65 70 75 80
Gln Gln Leu Ala Met Ile Ala Gly Val Glu Ala Asn Gly Ile Arg Pro
85 90 95
Ile Leu Asp Gln His Phe Pro Leu Glu Asn Leu Pro Asp Ala
100 105 110

<210> 1843  
 <211> 473  
 <212> DNA  
 <213> Homo sapiens

<400> 1843

aagctttggc atctccagca aaagatgtgc tatttactga taccatcacc atgaaggcca  
 60  
 acagttttga gtccagatta acaccaagca ggttcatgaa agccttaagt tatgcatcat  
 120  
 tagataaaga agattttattg agtcctatta atcaaaatac cctgcaacga tcttctctcag  
 180  
 tgcggtccat ggtgtccagt gccacatatg ggggttcaga tgattacatt ggtcttgctc  
 240  
 tcccgggtgga tataaatgat atattccagg taaaggatat tccctatttt cagacaaaaa  
 300  
 acataccacc acatgatgat cgagggtgcaa gagcatttgc ccatgatgca ggaggtcttc  
 360  
 catctggaac tggaggtctt gtaaaaaatt cttttcactt gctacgacag cagatgagtc  
 420  
 ttacggaaat aatgaattca atccattcag atgcctctcn cnnccncccc ccc  
 473

<210> 1844

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1844

Met	Lys	Ala	Asn	Ser	Phe	Glu	Ser	Arg	Leu	Thr	Pro	Ser	Arg	Phe	Met
1				5					10					15	
Lys	Ala	Leu	Ser	Tyr	Ala	Ser	Leu	Asp	Lys	Glu	Asp	Leu	Leu	Ser	Pro
			20					25					30		
Ile	Asn	Gln	Asn	Thr	Leu	Gln	Arg	Ser	Ser	Ser	Val	Arg	Ser	Met	Val
		35					40					45			
Ser	Ser	Ala	Thr	Tyr	Gly	Gly	Ser	Asp	Asp	Tyr	Ile	Gly	Leu	Ala	Leu
	50					55					60				
Pro	Val	Asp	Ile	Asn	Asp	Ile	Phe	Gln	Val	Lys	Asp	Ile	Pro	Tyr	Phe
65					70					75					80
Gln	Thr	Lys	Asn	Ile	Pro	Pro	His	Asp	Asp	Arg	Gly	Ala	Arg	Ala	Phe
			85						90					95	
Ala	His	Asp	Ala	Gly	Gly	Leu	Pro	Ser	Gly	Thr	Gly	Gly	Leu	Val	Lys
			100					105					110		
Asn	Ser	Phe	His	Leu	Leu	Arg	Gln	Gln	Met	Ser	Leu	Thr	Glu	Ile	Met
		115					120					125			
Asn	Ser	Ile	His	Ser	Asp	Ala	Ser	Xaa	Xaa	Xaa	Xaa	Pro			
	130					135					140				

<210> 1845

<211> 390

<212> DNA

<213> Homo sapiens

<400> 1845

aagcttacga cgcctagctt tggagacctg aaccacttga tcagtgcaac aatgagtgga  
 60  
 gtgacttgct gcctccgctt cccggggcag ctcaactcgg accttcggaa acttgcagtg  
 120  
 aacctgattc cattccctcg cctgcacttt tttatggctg gctttgcgcc actcacctcg  
 180

cgtggctccc agcagtaccg tgctctcact gtccctgagc tgacctcagca gatgtgggac  
 240  
 tccaagaaca tgatgtgtgc tgctgacccg cgtcatggcc gctacctcac agtatctgcc  
 300  
 atgttccgtg gaaagatgag caccaaggag gtggacgagc agatgctgaa cgtgcagaac  
 360  
 aagaactctt cctacttcgt ggagtggatc  
 390

<210> 1846  
 <211> 130  
 <212> PRT  
 <213> Homo sapiens

<400> 1846  
 Lys Leu Thr Thr Pro Ser Phe Gly Asp Leu Asn His Leu Ile Ser Ala  
 1 5 10 15  
 Thr Met Ser Gly Val Thr Cys Cys Leu Arg Phe Pro Gly Gln Leu Asn  
 20 25 30  
 Ser Asp Leu Arg Lys Leu Ala Val Asn Leu Ile Pro Phe Pro Arg Leu  
 35 40 45  
 His Phe Phe Met Val Gly Phe Ala Pro Leu Thr Ser Arg Gly Ser Gln  
 50 55 60  
 Gln Tyr Arg Ala Leu Thr Val Pro Glu Leu Thr Gln Gln Met Trp Asp  
 65 70 75 80  
 Ser Lys Asn Met Met Cys Ala Ala Asp Pro Arg His Gly Arg Tyr Leu  
 85 90 95  
 Thr Val Ser Ala Met Phe Arg Gly Lys Met Ser Thr Lys Glu Val Asp  
 100 105 110  
 Glu Gln Met Leu Asn Val Gln Asn Lys Asn Ser Ser Tyr Phe Val Glu  
 115 120 125  
 Trp Ile  
 130

<210> 1847  
 <211> 343  
 <212> DNA  
 <213> Homo sapiens

<400> 1847  
 cagccgtgct ttcctgcgtc aactcgggaa cggctatatc gcgcagatcc aacagttcca  
 60  
 tggctcgaag agtagtaaaa atatcaataa ctggcagagc atcgcgtcaa gctggcgacc  
 120  
 ctggccgccc ccgcgttggc cgatcacgcc atgttggagc aggccttcca gctgttccag  
 180  
 caaaaaagtt gcggacaatc tcctgccgga tggctcgggtg ttcgacttca gggagcgcca  
 240  
 tgcaactgcac tacgtcgtct atgacctgga gccgctgggt caggcggccc tggcgggcaa  
 300  
 gccctaacgg tggcaactgg ctgacttaca ccgccccac cgn  
 343

<210> 1848

<211> 94  
 <212> PRT  
 <213> Homo sapiens

<400> 1848  
 Met Ala Arg Arg Val Val Lys Ile Ser Ile Thr Gly Arg Ala Ser Arg  
 1 5 10 15  
 Gln Ala Gly Asp Pro Gly Arg Arg Arg Val Gly Arg Ser Arg His Val  
 20 25 30  
 Gly Ala Gly Leu Pro Ala Val Pro Ala Lys Lys Leu Arg Thr Ile Ser  
 35 40 45  
 Cys Arg Met Ala Arg Cys Ser Thr Ser Gly Ser Ala Met His Cys Thr  
 50 55 60  
 Thr Ser Ser Met Thr Trp Ser Arg Trp Phe Arg Arg Pro Trp Arg Ala  
 65 70 75 80  
 Ser Pro Asn Gly Gly Asn Trp Leu Thr Tyr Thr Ala Pro Thr  
 85 90

<210> 1849  
 <211> 390  
 <212> DNA  
 <213> Homo sapiens

<400> 1849  
 cggaagaac aggttcagca aagagcaata gaatgttccc gggctctcag tgcgattctt  
 60  
 gacattgaac atggagacccc aaaagagaat gtactagggtt cagcttttga catgaaacag  
 120  
 ctgaaggatg ctattgatga gactaaaata gctttgatgg gacattcttt tggaggagca  
 180  
 acagttcttc aagcccttag tgaggaccag agattcagat gtggagttgc tcttgatcca  
 240  
 tggatgtatc cggatgaacga agagctgtac tccagaaccc tccagcctct cctctttatc  
 300  
 aactctgcca aattccagac tccaaaggac atcgcaaaaa tgaaaaagtt ctaccagcct  
 360  
 gacaaggaaa ggaaanatga ttacaatcaa  
 390

<210> 1850  
 <211> 130  
 <212> PRT  
 <213> Homo sapiens

<400> 1850  
 Arg Lys Glu Gln Val Gln Gln Arg Ala Ile Glu Cys Ser Arg Ala Leu  
 1 5 10 15  
 Ser Ala Ile Leu Asp Ile Glu His Gly Asp Pro Lys Glu Asn Val Leu  
 20 25 30  
 Gly Ser Ala Phe Asp Met Lys Gln Leu Lys Asp Ala Ile Asp Glu Thr  
 35 40 45  
 Lys Ile Ala Leu Met Gly His Ser Phe Gly Gly Ala Thr Val Leu Gln  
 50 55 60  
 Ala Leu Ser Glu Asp Gln Arg Phe Arg Cys Gly Val Ala Leu Asp Pro

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65              70              75              80
Trp Met Tyr Pro Val Asn Glu Glu Leu Tyr Ser Arg Thr Leu Gln Pro
              85              90              95
Leu Leu Phe Ile Asn Ser Ala Lys Phe Gln Thr Pro Lys Asp Ile Ala
              100              105              110
Lys Met Lys Lys Phe Tyr Gln Pro Asp Lys Glu Arg Lys Xaa Asp Tyr
              115              120              125
Asn Gln
              130

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<210> 1851  
 <211> 574  
 <212> DNA  
 <213> Homo sapiens

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<400> 1851
ncgatcggag aggcctttccg cactggtgac ttggactcta agcccgaccc cagccggagc
60
ttcaggcctt accgagctga agacaatgat tcctatgcct ctgagatcaa ggagctgcag
120
ctggtgctgg ctgaggccca cgacagcctc cggggcttgc aagagcagct ctcccaggag
180
cggcagctac gaaaggagga ggccgacaat ttcaaccaga aaatgggtcca gctgaaggag
240
gaccagcaga gggcgctcct gaggcgggag tttgagctgc agagtctgag cctccagcgg
300
aggctggagc agaaattctg gagccaggag aagaacatgc tgggtgcagga gtcccagcaa
360
ttcaagcaca acttctctgct gctcttcatg aagctcaggt ggttctctcaa gcgctggcgg
420
cagggcaagg ttttgcccag cgaaggggat gacttctctg aggtgaacag catgaaggac
480
ctgtacttgc tgatggagga agacgagata aacgctcagc attctgataa caaggcctgc
540
acgggggaca gctggacca gaacacgccc aatg
574

```

<210> 1852  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1852
Xaa Ile Gly Glu Ala Phe Arg Thr Gly Asp Leu Asp Ser Lys Pro Asp
1              5              10              15
Pro Ser Arg Ser Phe Arg Pro Tyr Arg Ala Glu Asp Asn Asp Ser Tyr
              20              25              30
Ala Ser Glu Ile Lys Glu Leu Gln Leu Val Leu Ala Glu Ala His Asp
              35              40              45
Ser Leu Arg Gly Leu Gln Glu Gln Leu Ser Gln Glu Arg Gln Leu Arg
              50              55              60
Lys Glu Glu Ala Asp Asn Phe Asn Gln Lys Met Val Gln Leu Lys Glu
65              70              75              80
Asp Gln Gln Arg Ala Leu Leu Arg Arg Glu Phe Glu Leu Gln Ser Leu

```

				85				90					95		
Ser	Leu	Gln	Arg	Arg	Leu	Glu	Gln	Lys	Phe	Trp	Ser	Gln	Glu	Lys	Asn
			100					105					110		
Met	Leu	Val	Gln	Glu	Ser	Gln	Gln	Phe	Lys	His	Asn	Phe	Leu	Leu	Leu
		115					120					125			
Phe	Met	Lys	Leu	Arg	Trp	Phe	Leu	Lys	Arg	Trp	Arg	Gln	Gly	Lys	Val
	130					135					140				
Leu	Pro	Ser	Glu	Gly	Asp	Asp	Phe	Leu	Glu	Val	Asn	Ser	Met	Lys	Asp
145					150					155					160
Leu	Tyr	Leu	Leu	Met	Glu	Glu	Asp	Glu	Ile	Asn	Ala	Gln	His	Ser	Asp
				165					170					175	
Asn	Lys	Ala	Cys	Thr	Gly	Asp	Ser	Trp	Thr	Gln	Asn	Thr	Pro	Asn	
			180					185					190		

```
<210> 1853
<211> 338
<212> DNA
<213> Homo sapiens
```

```
<400> 1853
gccggcgccg accaagccac ggcatgcccc acccaccttg gaagaggtgt cgttcgcgcca
60
cgtcattgag gagcgcgccg tcgaagctga cttgttcgtc cgctcgctca atacactcga
120
gcctgcgacg ggcatggcac ttctgcgcac ctgcgaccac atggatggca aggtcggcac
180
gacgtttttac ctggatgacg atgtcatttt tgtcgcgcca cagaagcagc gctcagccga
240
gggccagcga ctcgaatacg agcccgcttc tttggccgag ttgctcgagc gcgctgctgc
300
atagaataca tatacccaag ctatgatgat gccgtcgt
338
```

```
<210> 1854
<211> 100
<212> PRT
<213> Homo sapiens
```

```

<400> 1854
Met Pro His Pro Pro Trp Lys Arg Cys Arg Ser Ala Thr Ser Leu Arg
 1                    5                      10                15
Ser Ala Pro Ser Lys Leu Thr Cys Ser Ser Ala Arg Ser Ile His Ser
          20                      25                30
Ser Leu Arg Arg Ala Trp His Phe Cys Ala Ser Arg Thr Thr Trp Met
          35                      40                45
Ala Arg Ser Ala Arg Arg Phe Thr Trp Met Thr Met Ser Phe Leu Ser
          50                      55                60
Arg His Arg Ser Ser Ala Gln Pro Arg Ala Ser Asp Ser Asn Thr Ser
65                    70                      75                80
Pro Ser Leu Trp Pro Ser Cys Ser Ser Ala Leu Leu His Arg Ile His
          85                      90                95
Ile Pro Lys Leu
          100

```

<210> 1855  
 <211> 429  
 <212> DNA  
 <213> Homo sapiens

<400> 1855  
 gcgtccttcg cgtacgtgga cgagggcggg caggtgttcg tccagtgcag caccagcac  
 60  
 ccgagcgaaa cgcaggaaat cgtggcgcac gtcctggacc tggacaacca cgaggtcacg  
 120  
 gtgcagtgct tgcgcatggg cgggtggcttt ggcggttaagg aaatgcagcc gcacgggttc  
 180  
 gccgcgatcg cagcactcgg cgcgaccctg accgggcgac cggttcgact gcgactgacc  
 240  
 cgaaaccagg acatcaccat ctccggaaag cgccacccat acctcgcgga gtgggacgtg  
 300  
 gccttcgacg acgacggccg cctccaggct ctgcgcgcca ccgtcaccag cgacggcggg  
 360  
 tggagcctgg acctctcgga gccggtgatg cagcggacgg tgtgtcacat cgataactcc  
 420  
 tattggatc  
 429

<210> 1856  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 1856  
 Ala Ser Phe Ala Tyr Val Asp Glu Gly Gly Gln Val Phe Val Gln Cys  
 1 5 10 15  
 Ser Thr Gln His Pro Ser Glu Thr Gln Glu Ile Val Ala His Val Leu  
 20 25 30  
 Asp Leu Asp Asn His Glu Val Thr Val Gln Cys Leu Arg Met Gly Gly  
 35 40 45  
 Gly Phe Gly Gly Lys Glu Met Gln Pro His Gly Phe Ala Ala Ile Ala  
 50 55 60  
 Ala Leu Gly Ala Thr Leu Thr Gly Arg Pro Val Arg Leu Arg Leu Thr  
 65 70 75 80  
 Arg Asn Gln Asp Ile Thr Ile Ser Gly Lys Arg His Pro Tyr Leu Ala  
 85 90 95  
 Glu Trp Asp Val Ala Phe Asp Asp Asp Gly Arg Leu Gln Ala Leu Arg  
 100 105 110  
 Ala Thr Val Thr Ser Asp Gly Gly Trp Ser Leu Asp Leu Ser Glu Pro  
 115 120 125  
 Val Met Gln Arg Thr Val Cys His Ile Asp Asn Ser Tyr Trp Ile  
 130 135 140

<210> 1857  
 <211> 393  
 <212> DNA  
 <213> Homo sapiens

<400> 1857

gtgcacgccg ctgccccagc cgtcgcctac cgatcaacag acgcagccgc cgtgcgttga  
60  
gataccagcc gagcacgatc atgctcagca tggtcagcag cagccagaac ggaaatcgca  
120  
gcaggcgctc gaacagctca ctgccaccca gcaccagcgg gattgccccg gccacgacca  
180  
gtgcgcccag gagcagccac catcgccccg tcatgctgcg gcactcgata ccaatacgtt  
240  
gcgcttcaac caatcgatct tggtcgaggg atgccgcccc tcttccaaca ggcgagtcac  
300  
cagactcagc cagtaacacc gcgaaaaatc gtggcgcatg tcgacagggg gcaaaccgag  
360  
acgcagcacg ggtgcctgtc ggtggcgggc gag  
393

<210> 1858

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1858

Met	Leu	Ser	Met	Val	Ser	Ser	Ser	Gln	Asn	Gly	Asn	Arg	Ser	Arg	Arg
1			5					10				15			
Ser	Asn	Ser	Ser	Leu	Pro	Pro	Ser	Thr	Ser	Gly	Ile	Ala	Pro	Ala	Thr
		20					25					30			
Thr	Ser	Ala	Pro	Arg	Ser	Ser	His	Arg	Pro	Leu	Met	Leu	Arg	His	
	35					40				45					
Ser	Ile	Pro	Ile	Arg	Cys	Ala	Ser	Thr	Asn	Arg	Ser	Trp	Ser	Arg	His
	50				55				60						
Ala	Ala	His	Leu	Pro	Thr	Gly	Glu	Ser	Pro	Asp	Ser	Ala	Ser	Asn	Thr
65				70					75					80	
Ala	Lys	Asn	Arg	Gly	Ala	Cys	Arg	Gln	Gly	Ala	Asn	Arg	Asp	Ala	Ala
		85						90						95	
Arg	Val	Pro	Val	Gly	Gly	Arg									
			100												

<210> 1859

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1859

nagatctggc gctcgtcac caacttcctc tacttccgca agatggattt ggattttctg  
60  
ttccacatgt tttttctcgc acgatactgc aagcttctgg aggagaactc atttagagga  
120  
agaactgccg acttttttta catgctcttg tttggtgcta ctgtcctaac tagcattggt  
180  
ctgatcggag ggatgatacc ttacatttcc gagacatttg ccagaattct gttcctgagc  
240  
aattcattga cgtttatgat ggtttatgtc tggagcaagc acaatcctat catccatatg  
300  
agcaatctgg gctgttcac ctttacgggt gcatacttac catgg  
345



<210> 1860  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 1860  
 Xaa Ile Trp Arg Leu Val Thr Asn Phe Leu Tyr Phe Arg Lys Met Asp  
 1 5 10 15  
 Leu Asp Phe Leu Phe His Met Phe Phe Leu Ala Arg Tyr Cys Lys Leu  
 20 25 30  
 Leu Glu Glu Asn Ser Phe Arg Gly Arg Thr Ala Asp Phe Phe Tyr Met  
 35 40 45  
 Leu Leu Phe Gly Ala Thr Val Leu Thr Ser Ile Val Leu Ile Gly Gly  
 50 55 60  
 Met Ile Pro Tyr Ile Ser Glu Thr Phe Ala Arg Ile Leu Phe Leu Ser  
 65 70 75 80  
 Asn Ser Leu Thr Phe Met Met Val Tyr Val Trp Ser Lys His Asn Pro  
 85 90 95  
 Ile Ile His Met Ser Asn Leu Gly Leu Phe Thr Phe Thr Ala Ala Tyr  
 100 105 110  
 Leu Pro Trp  
 115

<210> 1861  
 <211> 435  
 <212> DNA  
 <213> Homo sapiens

<400> 1861  
 gcgttgactg tagtgagtga cgaagctgat atacaaaatg cgccgggCGT tagaaaagcc  
 60  
 aatagtgagc ttcattcagt cggcttaggt gttatgaact tacatggcta tcttgctaaa  
 120  
 aacaaaattg gctatgagtc ggaagaagct aaagattttg ctaatatatt ctttatgatg  
 180  
 atgaattact attcacttga aagatcaatg caaatagcaa aagaaagaca ggaaacgttt  
 240  
 aaagactttg ataagtcaga ttatgcaa at ggaaaatatt tcgaatttta tacttcgcaa  
 300  
 tcatttgaac cgaaatacga aaaagtacgt aaattatttg atggttttaga aatcccaacg  
 360  
 cctgaagatt ggaaagcatt gcaaaaagaa gttgaaactc acgggtttatt ccatgcttat  
 420  
 cgtttagcga ttgca  
 435

<210> 1862  
 <211> 145  
 <212> PRT  
 <213> Homo sapiens

<400> 1862  
 Ala Leu Thr Val Val Ser Asp Glu Ala Asp Ile Gln Asn Ala Pro Gly

1	5	10	15
Val Arg Lys	Ala Asn Ser Glu Leu	His Ser Val Gly Leu Gly	Val Met
	20	25	30
Asn Leu His	Gly Tyr Leu Ala Lys	Asn Lys Ile Gly Tyr Glu	Ser Glu
	35	40	45
Glu Ala Lys	Asp Phe Ala Asn Ile Phe Phe	Met Met Met	Asn Tyr Tyr
	50	55	60
Ser Leu Glu	Arg Ser Met Gln Ile Ala Lys	Glu Arg Gln Glu Thr Phe	
65	70	75	80
Lys Asp Phe	Asp Lys Ser Asp Tyr Ala Asn	Gly Lys Tyr Phe Glu Phe	
	85	90	95
Tyr Thr Ser	Gln Ser Phe Glu Pro Lys Tyr	Glu Lys Val Arg Lys Leu	
	100	105	110
Phe Asp Gly	Leu Glu Ile Pro Thr Pro Glu	Asp Trp Lys Ala Leu Gln	
	115	120	125
Lys Glu Val	Glu Thr His Gly Leu Phe His	Ala Tyr Arg Leu Ala Ile	
	130	135	140
Ala			
145			

&lt;210&gt; 1863

&lt;211&gt; 792

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1863

```

nggatacctca cgcccgccat catacgtggg atatacgttga gcaaatacgt catgacgggg
60
tctccgtcgt gctcactacc cacaacatgg atgaggctca acggctgggt gatcacgtct
120
ggatcgtcga tcgcggcagg gtcgcaactc atggaactgt gccagagctc accgctgagt
180
cgagtttgga agatgtgttc ctactcaca ctagtgaccg cgcagcaggg aggaattgac
240
atgacgacac tcgatctcgg ccccgcacct caggccgcac cggctgctgc acgctgctg
300
aaccacgctc tcaccgaggt gcgtctggtg atgocgaacg gtgagcagct gctactagct
360
ctcgtcattc ccacgggat catcgtcgcc gggcgcttcc tgggcggccg ggtcggactg
420
acgatggacg tcttagcacc ctactgctg gcgctcgcca tctggtcgac atgtttcact
480
tcccaagcga tcatgaccgg ttttgaacgc cgttacgggg tgctcgaacg attgtccgca
540
accccgtagt gtcggtcggg tctgctagct ggcaaggcga tggcttattc cgttatcagt
600
ctcgtcagg tgatactgct tgatcatc tcttttagcgc tgggctggca ccccccagggt
660
tcgggcctgg cctggctccc aacctgggtg agcgttgtgc tcgccatgat gacattcggg
720
ctcgcagcac tggcaatggc cggcgctggc aaagctgaag tcaactctgg actggccaac
780
ttggtataca tc
792

```

<210> 1864  
 <211> 264  
 <212> PRT  
 <213> Homo sapiens

<400> 1864  
 Xaa Ile Leu Thr Pro Ala Ile Ile Arg Gly Ile Ser Leu Ser Lys Cys  
 1 5 10 15  
 Val Met Thr Gly Ser Pro Ser Cys Ser Leu Pro Thr Thr Trp Met Arg  
 20 25 30  
 Leu Asn Gly Trp Leu Ile Thr Ser Gly Ser Ser Ile Ala Ala Gly Ser  
 35 40 45  
 Gln Leu Met Glu Leu Cys Gln Ser Ser Pro Leu Ser Arg Val Trp Lys  
 50 55 60  
 Met Cys Ser Ser Leu Thr Leu Val Thr Ala Gln Gln Gly Gly Ile Asp  
 65 70 75 80  
 Met Thr Thr Leu Asp Leu Arg Pro Ala Pro Gln Ala Ala Pro Ala Ala  
 85 90 95  
 Ala Arg Val Arg Asn His Ala Leu Thr Glu Val Arg Leu Val Met Arg  
 100 105 110  
 Asn Gly Glu Gln Leu Leu Leu Ala Leu Val Ile Pro Ile Gly Ile Ile  
 115 120 125  
 Val Ala Gly Arg Phe Leu Gly Gly Arg Val Gly Leu Thr Met Asp Val  
 130 135 140  
 Leu Ala Pro Ser Val Leu Ala Leu Ala Ile Trp Ser Thr Cys Phe Thr  
 145 150 155 160  
 Ser Gln Ala Ile Met Thr Gly Phe Glu Arg Arg Tyr Gly Val Leu Glu  
 165 170 175  
 Arg Leu Ser Ala Thr Pro Leu Gly Arg Ser Gly Leu Leu Ala Gly Lys  
 180 185 190  
 Ala Met Ala Tyr Ser Val Ile Ser Leu Ala Gln Val Ile Leu Leu Val  
 195 200 205  
 Ile Ile Ser Leu Ala Leu Gly Trp His Pro His Gly Ser Gly Leu Ala  
 210 215 220  
 Trp Leu Pro Thr Leu Val Ser Val Val Leu Ala Met Met Thr Phe Gly  
 225 230 235 240  
 Leu Ala Ala Leu Ala Met Ala Gly Ala Gly Lys Ala Glu Val Thr Leu  
 245 250 255  
 Gly Leu Ala Asn Leu Val Tyr Ile  
 260

<210> 1865  
 <211> 717  
 <212> DNA  
 <213> Homo sapiens

<400> 1865  
 ngccggctga tcaaacaact cacagacatg ggcttcccgga gagagccagc tgaggaggcc  
 60  
 ttgaagagta acaatatgaa tcttgatcag gccatgagcg ctctgctgga aaagaagggtg  
 120  
 gacgtggaca agcgtgggct gggagtgacc gaccataatg gaatggccgc caagcccctc  
 180

ggctgccgcc cgccaatctc caaagagtct tccgtggacc gccccaccct tcttgacaag  
 240  
 gatggcggcc tcgtggaaga gcccacgcct tcaccgttct tgccttcccc aagcctgaag  
 300  
 ctcccccttt cacacagtgc actccccagt caggccctgg gtgggggtgc ctccgggctg  
 360  
 ggcatgcaaa acttgaattc ttctagacag ataccgagtg gcaatctggg tatgtttggc  
 420  
 aatagtggag cagcacaagc caggaccatg cagcagccgc cacagccacc agtgcagcct  
 480  
 cttaactctt cccagcccag tctccgtgct caagtgcctc agtttctatc ccctcaggtt  
 540  
 caagcacagc ttttgagtt tgcagcaaaa aacattggtc tcaaccctgc actattaacc  
 600  
 tcgccaatta atcctcaaca tatgacgatg ttgaaccagc tctatcagct gcagctggca  
 660  
 taccaacgtt tacaaatcca gcagcagatg ttacaggccc agcgtaatgt gtccgga  
 717

<210> 1866

<211> 239

<212> PRT

<213> Homo sapiens

<400> 1866

Xaa	Arg	Leu	Ile	Lys	Gln	Leu	Thr	Asp	Met	Gly	Phe	Pro	Arg	Glu	Pro
1				5					10					15	
Ala	Glu	Glu	Ala	Leu	Lys	Ser	Asn	Asn	Met	Asn	Leu	Asp	Gln	Ala	Met
			20					25					30		
Ser	Ala	Leu	Leu	Glu	Lys	Lys	Val	Asp	Val	Asp	Lys	Arg	Gly	Leu	Gly
		35					40					45			
Val	Thr	Asp	His	Asn	Gly	Met	Ala	Ala	Lys	Pro	Leu	Gly	Cys	Arg	Pro
	50					55					60				
Pro	Ile	Ser	Lys	Glu	Ser	Ser	Val	Asp	Arg	Pro	Thr	Leu	Leu	Asp	Lys
65					70				75					80	
Asp	Gly	Gly	Leu	Val	Glu	Glu	Pro	Thr	Pro	Ser	Pro	Phe	Leu	Pro	Ser
			85					90					95		
Pro	Ser	Leu	Lys	Leu	Pro	Leu	Ser	His	Ser	Ala	Leu	Pro	Ser	Gln	Ala
		100						105					110		
Leu	Gly	Gly	Val	Ala	Ser	Gly	Leu	Gly	Met	Gln	Asn	Leu	Asn	Ser	Ser
	115						120					125			
Arg	Gln	Ile	Pro	Ser	Gly	Asn	Leu	Gly	Met	Phe	Gly	Asn	Ser	Gly	Ala
	130					135					140				
Ala	Gln	Ala	Arg	Thr	Met	Gln	Gln	Pro	Pro	Gln	Pro	Pro	Val	Gln	Pro
145					150					155				160	
Leu	Asn	Ser	Ser	Gln	Pro	Ser	Leu	Arg	Ala	Gln	Val	Pro	Gln	Phe	Leu
			165					170					175		
Ser	Pro	Gln	Val	Gln	Ala	Gln	Leu	Leu	Gln	Phe	Ala	Ala	Lys	Asn	Ile
		180						185					190		
Gly	Leu	Asn	Pro	Ala	Leu	Leu	Thr	Ser	Pro	Ile	Asn	Pro	Gln	His	Met
	195						200					205			
Thr	Met	Leu	Asn	Gln	Leu	Tyr	Gln	Leu	Gln	Leu	Ala	Tyr	Gln	Arg	Leu
	210					215					220				
Gln	Ile	Gln	Gln	Gln	Met	Leu	Gln	Ala	Gln	Arg	Asn	Val	Ser	Gly	

225

230

235

&lt;210&gt; 1867

&lt;211&gt; 518

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1867

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nnggggcacg gttagggcca gtgggcagag gggtgagga tatgcaggac cttccactgt
60
tccatgcatg ggacggcact tgggtccgcg atcaggtagc caggcatgga aggaacatgg
120
gaggaaggga actgtctggt gcgccagtgt tgttcaagga ggatgtgaca agacaggcca
180
tctggttggc tggccctgtt acccaacaac gtggtggcca aggccttgtg cccggagagg
240
ttcttggggg ccagcagggg gctacatagg acatgggtgg ggaccccagc tccgagccca
300
cctctctgc ctcacccct tccaccnng cagccccgc ctctccgca gaactctccc
360
caagccagac cgcttgacc ggctgcttaa gtcaggcttt gggacatacc ctgggaggaa
420
gcgaggtgct ttgcaccccc aagtgatcat gttcccgtgc ccagcctgcc aaggatgatg
480
ggagcttggg gagcggggtc tggcagggtc tttccgga
518

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&lt;210&gt; 1868

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1868

```

Gln Asp Arg Pro Ser Gly Trp Leu Ala Leu Leu Pro Asn Asn Val Val
1          5          10          15
Ala Lys Ala Leu Cys Pro Glu Arg Phe Leu Gly Ala Ser Arg Gly Leu
20          25          30
His Arg Thr Trp Val Gly Thr Pro Ala Pro Ser Pro Pro Leu Leu Pro
35          40          45
Pro Pro Leu Pro Pro Xaa Gln Pro Pro Pro Leu Pro Gln Asn Ser Pro
50          55          60
Gln Ala Arg Pro Pro Gly Pro Ala Ala
65          70

```

&lt;210&gt; 1869

&lt;211&gt; 436

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1869

```

acgcgtcacc ttctgtctgg agctactggg agccctcgga cacctgctg cattgcccga
60
ccgtgacatg ccgagcaccc aaaccacct gtggattcgc gagctgagcc gcatcgaccg
120

```

cgacgtgtcg actgccaccc actttcggtg gagcgacgac ggcaccgtgc taggtcagac  
 180  
 gaccgacgat ggcaccgagc ctgaggttgt tgccctgcc a gcggtctact gccgtcggtg  
 240  
 cggccgcagc ggatggggag tccagctcgc cagcaccggc aataacctca gcgagaacaa  
 300  
 cgacagcatc cgacggaccc acgcggcaca cgacggctgc ttccgagcct tgctttcggc  
 360  
 ccctcgagag ggagccagcg cggctcgacac cggcgaggcg aactgtcct tacgctgggt  
 420  
 cgacaccgtc aacagg  
 436

<210> 1870

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1870

Met	Pro	Ser	Thr	Glu	Thr	His	Leu	Trp	Ile	Arg	Glu	Leu	Ser	Arg	Ile
1				5					10					15	
Asp	Arg	Asp	Val	Ser	Thr	Ala	Thr	His	Phe	Arg	Trp	Ser	Asp	Asp	Gly
			20					25					30		
Thr	Val	Leu	Gly	Gln	Thr	Thr	Asp	Asp	Gly	Thr	Glu	Pro	Glu	Val	Val
		35					40					45			
Ala	Leu	Pro	Ala	Val	Tyr	Cys	Arg	Arg	Cys	Gly	Arg	Ser	Gly	Trp	Gly
	50					55					60				
Val	Gln	Leu	Ala	Ser	Thr	Gly	Asn	Asn	Leu	Ser	Glu	Asn	Asn	Asp	Ser
65					70					75				80	
Ile	Arg	Arg	Thr	His	Ala	Ala	His	Asp	Gly	Arg	Phe	Arg	Ala	Leu	Leu
				85					90					95	
Ser	Ala	Pro	Arg	Glu	Gly	Ala	Ser	Ala	Val	Asp	Thr	Gly	Glu	Ala	Thr
			100					105					110		
Leu	Ser	Leu	Arg	Trp	Phe	Asp	Thr	Val	Asn	Arg					
		115					120								

<210> 1871

<211> 474

<212> DNA

<213> Homo sapiens

<400> 1871

nntgcagcgc cccgaggtcg atgtctccaa cgtctttgcc agccttgaca tggctagcga  
 60  
 gcccgaacctc gtccgtaccc tgctgaggca agcccaacaa tgaccgggga acagctcgcg  
 120  
 cattggatcg aggagtcgac gtcgacggtg tttttcggcg gcgcccgaat gtccaccgaa  
 180  
 tcaggatttc cggactttcg ctcggtggc gggctttaca ccactcagca tgacctgcc  
 240  
 ttccccggcg agtacatgct cagtcacagc tgtttgggtg agcatcccgc ggagttcttc  
 300  
 gactttctacc gcacctacct catccatcct caggccaggc ccaatgctgg tcatcgctcg  
 360

ttggttgcct tggagcaggc tggggaactt tcgacgatca ttaccagaa tattgacggc  
 420  
 ctgcaccaag aagctgggtc tcgtcaggtc attgagttgc atgggtcggt gcac  
 474

<210> 1872  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<400> 1872  
 Met Thr Gly Glu Gln Leu Ala His Trp Ile Glu Glu Ser Thr Ser Thr  
 1 5 10 15  
 Val Phe Phe Gly Gly Ala Gly Met Ser Thr Glu Ser Gly Ile Pro Asp  
 20 25 30  
 Phe Arg Ser Ala Gly Gly Leu Tyr Thr Thr Gln His Asp Leu Pro Phe  
 35 40 45  
 Pro Ala Glu Tyr Met Leu Ser His Ser Cys Leu Val Glu His Pro Ala  
 50 55 60  
 Glu Phe Phe Asp Phe Tyr Arg Thr Tyr Leu Ile His Pro Gln Ala Arg  
 65 70 75 80  
 Pro Asn Ala Gly His Arg Ala Leu Val Ala Leu Glu Gln Ala Gly Glu  
 85 90 95  
 Leu Ser Thr Ile Ile Thr Gln Asn Ile Asp Gly Leu His Gln Glu Ala  
 100 105 110  
 Gly Ser Arg Gln Val Ile Glu Leu His Gly Ser Val His  
 115 120 125

<210> 1873  
 <211> 338  
 <212> DNA  
 <213> Homo sapiens

<400> 1873  
 nacgcgtaga aatgaagccc cagctggtca gagaccggaa atccggtagt gcacgggacg  
 60  
 ggttcctcgc gggatctcgc aggggagacc cccaccggg aggactggag gcagcgctc  
 120  
 tcccgccccg gcgcgcgcag cctatttccc tctttccaag gggccaatcc ccaccgggc  
 180  
 ccgcaggggg cgcgctcaag gcaaggtccg cggcgagaac ggtgcccagt gggagcgaag  
 240  
 ggcgaggcca gcccttggtc cttggccggc agttcgggtc ccgcctccaa attttagtat  
 300  
 gcatatgagt caccaggaaa gttttttgaa acaaattt  
 338

<210> 1874  
 <211> 93  
 <212> PRT  
 <213> Homo sapiens

<400> 1874  
 Ser Pro Ser Trp Ser Glu Thr Gly Asn Pro Val Val His Gly Thr Gly

1				5					10					15			
Ser	Leu	Gly	Asp	Leu	Gly	Gly	Glu	Thr	Pro	Thr	Arg	Glu	Asp	Trp	Arg		
			20					25					30				
Gln	Arg	Leu	Ser	Arg	Pro	Gly	Ala	Arg	Ser	Leu	Phe	Pro	Ser	Phe	Gln		
		35					40					45					
Gly	Ala	Asn	Pro	His	Arg	Gly	Pro	Gln	Gly	Ala	Arg	Ser	Arg	Gln	Gly		
	50					55					60						
Pro	Arg	Arg	Glu	Arg	Cys	Pro	Val	Gly	Ala	Lys	Gly	Glu	Ala	Ser	Pro		
65					70					75					80		
Trp	Ser	Leu	Ala	Gly	Ser	Ser	Gly	Pro	Ala	Ser	Lys	Phe					
				85					90								

&lt;210&gt; 1875

&lt;211&gt; 366

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1875

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aagcttggcg tacaagtggg tcgtcgtttc tcaggtgggtg gagccgtgta tcacgatatg
60
ggcaatatct gcttctgctt cattacagaa gatgatggcg atagcttcg tgattttgga
120
aaattcacag aaccctgat tgaagcactc cataaaatgg gagcaacagg ggcagagtta
180
caaggacgta acgaccttct catcgacgga aagaaattct ctggaaatgc gatgtactca
240
aacaatggcc gtttaacagc gcacggaaca ttaatgttgg atttagatgt gagcattttg
300
ccacaaattd tacgtccaaa acaagagaaa atcgagtcaa aaggaatcaa gtcggttcgt
360
tcacgc
366

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&lt;210&gt; 1876

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1876

Lys	Leu	Gly	Val	Gln	Val	Val	Arg	Arg	Phe	Ser	Gly	Gly	Gly	Ala	Val		
1				5					10					15			
Tyr	His	Asp	Met	Gly	Asn	Ile	Cys	Phe	Cys	Phe	Ile	Thr	Glu	Asp	Asp		
		20						25					30				
Gly	Asp	Ser	Phe	Arg	Asp	Phe	Gly	Lys	Phe	Thr	Glu	Pro	Val	Ile	Glu		
		35					40					45					
Ala	Leu	His	Lys	Met	Gly	Ala	Thr	Gly	Ala	Glu	Leu	Gln	Gly	Arg	Asn		
	50					55				60							
Asp	Leu	Leu	Ile	Asp	Gly	Lys	Lys	Phe	Ser	Gly	Asn	Ala	Met	Tyr	Ser		
65					70					75					80		
Asn	Asn	Gly	Arg	Leu	Thr	Ala	His	Gly	Thr	Leu	Met	Leu	Asp	Leu	Asp		
				85				90							95		
Val	Ser	Ile	Leu	Pro	Gln	Ile	Leu	Arg	Pro	Lys	Gln	Glu	Lys	Ile	Glu		
			100					105					110				
Ser	Lys	Gly	Ile	Lys	Ser	Val	Arg	Ser	Arg								



115

120

<210> 1877  
 <211> 357  
 <212> DNA  
 <213> Homo sapiens

<400> 1877  
 acgcgtgagt ggtcgcaaat atgacgggca agaaacgctt agaaagaaac taccattaa  
 60  
 cgagggttatg caaattgcag aaatctctct atcggattgt ggctatatta tttcatcttt  
 120  
 ccaagctgct ggaccaaggg ctgtaggggt gcaacgacct attatatctg aacatttttt  
 180  
 tcaatttgac ccatttgata aacgacattg ggttgtctca catcatttac cacacgctgc  
 240  
 gacagctgct ttcacttccg gatttgaaga ttgcgctgga ttagtttcag atactgccgg  
 300  
 atcgaacact cttgatggaa aggactatgt tgaaagctgc tgcaatgcta ttccacg  
 357

<210> 1878  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 1878  
 Met Gln Ile Ala Glu Ile Ser Leu Ser Asp Cys Gly Tyr Ile Ile Ser  
 1 5 10 15  
 Ser Phe Gln Ala Gly Pro Arg Ala Val Gly Leu Gln Arg Pro Ile  
 20 25 30  
 Ile Ser Glu His Phe Phe Gln Phe Asp Pro Phe Asp Lys Arg His Trp  
 35 40 45  
 Val Val Ser His His Leu Pro His Ala Ala Thr Ala Ala Phe Thr Ser  
 50 55 60  
 Gly Phe Glu Asp Cys Ala Gly Leu Val Ser Asp Thr Ala Gly Ser Asn  
 65 70 75 80  
 Thr Leu Asp Gly Lys Asp Tyr Val Glu Ser Cys Cys Asn Ala Ile Pro  
 85 90 95

<210> 1879  
 <211> 1062  
 <212> DNA  
 <213> Homo sapiens

<400> 1879  
 nacgcgtgga tgctccttgg acggcttttt cgtggtagag ggttcccggg gcgcgcgcga  
 60  
 tccctgggaa gtagctgaag agaaggcaca ggaagagtcg cctccactga tgggtctcct  
 120  
 gtccctccca caggctctga cgcccgtctt gcggcttcgg tgtttgaaca ggccacagtc  
 180  
 caggagcgt tacattcagg agctccgcgt agcacctgcc caaccaaact cagccctccg  
 240

ttaagatcct ggttccatgc cgcagtagga cagcaggccc aagtctgcac atcccagtga  
 300  
 tgcaccatgc caatagtgga taagttgaag gaggccttga aaccggccg caaggactcg  
 360  
 gctgatgatg gagaactggg gaagcttctt gcctcctctg ccaagaaggt ccttttacag  
 420  
 aaaatcgagt tcgagccagc cagcaagagc ttctcctacc agctggaggc cttaaagagc  
 480  
 aaatatgtgt tgctcaaccc caaacagag ggagctagtc gccacaagag tggagatgac  
 540  
 ccaccggcca ggagacaggg cagtgaacac acgtatgaga gctgtggtga cggagtccca  
 600  
 gcccgcaga aagtgtttt cccacaggag cgactgtctc tgaggtggga gcgggtcttc  
 660  
 cgcggtggcg caggactcca caaccttggc aacacctgct ttctcaatgc caccatccag  
 720  
 tgcttgacct acacaccacc tctagccaac tacctgctct ccaaggagca tgctcgcagc  
 780  
 tgccaccagg gaagcttctg catgctgtgt gtcatgcaga accacattgt ccaggccttc  
 840  
 gccaacagcg gcaacgccat caagcccgtc tccttcatcc gagacctgaa aaagatcgcc  
 900  
 cgacatttcc gctttgggaa ccaggaggac gcgcatgagt tctgcggtta caccatcgac  
 960  
 gccatgcaga aagcctgcct gaatggctgt gccaaagtgg atcgtcaaac gcaggctact  
 1020  
 accttggtcc atcaaatttt tggagggtat ctcagatcac gc  
 1062

&lt;210&gt; 1880

&lt;211&gt; 252

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1880

Met	Pro	Ile	Val	Asp	Lys	Leu	Lys	Glu	Ala	Leu	Lys	Pro	Gly	Arg	Lys
1				5				10						15	
Asp	Ser	Ala	Asp	Asp	Gly	Glu	Leu	Gly	Lys	Leu	Leu	Ala	Ser	Ser	Ala
		20						25					30		
Lys	Lys	Val	Leu	Leu	Gln	Lys	Ile	Glu	Phe	Glu	Pro	Ala	Ser	Lys	Ser
		35					40					45			
Phe	Ser	Tyr	Gln	Leu	Glu	Ala	Leu	Lys	Ser	Lys	Tyr	Val	Leu	Leu	Asn
	50					55					60				
Pro	Lys	Thr	Glu	Gly	Ala	Ser	Arg	His	Lys	Ser	Gly	Asp	Asp	Pro	Pro
65					70					75					80
Ala	Arg	Arg	Gln	Gly	Ser	Glu	His	Thr	Tyr	Glu	Ser	Cys	Gly	Asp	Gly
			85					90						95	
Val	Pro	Ala	Pro	Gln	Lys	Val	Leu	Phe	Pro	Thr	Glu	Arg	Leu	Ser	Leu
		100						105					110		
Arg	Trp	Glu	Arg	Val	Phe	Arg	Val	Gly	Ala	Gly	Leu	His	Asn	Leu	Gly
	115						120					125			
Asn	Thr	Cys	Phe	Leu	Asn	Ala	Thr	Ile	Gln	Cys	Leu	Thr	Tyr	Thr	Pro
	130					135					140				
Pro	Leu	Ala	Asn	Tyr	Leu	Leu	Ser	Lys	Glu	His	Ala	Arg	Ser	Cys	His

145		150		155		160
Gln Gly Ser Phe Cys Met Leu Cys Val Met Gln Asn His Ile Val Gln						
		165		170		175
Ala Phe Ala Asn Ser Gly Asn Ala Ile Lys Pro Val Ser Phe Ile Arg						
		180		185		190
Asp Leu Lys Lys Ile Ala Arg His Phe Arg Phe Gly Asn Gln Glu Asp						
		195		200		205
Ala His Glu Phe Leu Arg Tyr Thr Ile Asp Ala Met Gln Lys Ala Cys						
		210		215		220
Leu Asn Gly Cys Ala Lys Leu Asp Arg Gln Thr Gln Ala Thr Thr Leu						
225		230		235		240
Val His Gln Ile Phe Gly Gly Tyr Leu Arg Ser Arg						
		245		250		

<210> 1881  
 <211> 358  
 <212> DNA  
 <213> Homo sapiens

<400> 1881  
 natcaccatg gatggacgcc ggcaaagcaa catcaatcga tgtcaagcca cagacatctc  
 60  
 aaatccctgc agaaccgcaa agtttggcag agaagaagga tgaatgggag atcgcataca  
 120  
 tcaacacgaa gattaacgac gtctacaacc ctctcaacaa caatgtggac tggttaagca  
 180  
 cgagaattga tctgctacag caagatttgg acaccactcg caagaaggat ctaaaaccag  
 240  
 ccacatcgat cgatatctgc accatcacat cgatcgatag caagttcgta gccatggaag  
 300  
 atagggttaca atcttataag gatatgcacg accgtttcac ctcacctatc aggcgata  
 358

<210> 1882  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 1882  
 Met Asp Ala Gly Lys Ala Thr Ser Ile Asp Val Lys Pro Gln Thr Ser  
 1 5 10 15  
 Gln Ile Pro Ala Glu Pro Gln Ser Leu Ala Glu Lys Lys Asp Glu Trp  
 20 25 30  
 Glu Ile Ala Tyr Ile Asn Thr Lys Ile Asn Asp Val Tyr Asn Pro Leu  
 35 40 45  
 Asn Asn Asn Val Asp Trp Leu Ser Thr Arg Ile Asp Leu Leu Gln Gln  
 50 55 60  
 Asp Leu Asp Thr Thr Arg Lys Lys Asp Leu Lys Pro Ala Thr Ser Ile  
 65 70 75 80  
 Asp Ile Cys Thr Ile Thr Ser Ile Asp Ser Lys Phe Val Ala Met Glu  
 85 90 95  
 Asp Arg Leu Gln Ser Tyr Lys Asp Met His Asp Arg Phe Thr Ser Pro  
 100 105 110  
 Ile Arg Arg

115

<210> 1883  
 <211> 367  
 <212> DNA  
 <213> Homo sapiens

<400> 1883  
 ggatcctatc atgaatctgc actctgacca gggaagtaac tcccttggt gctcagactt  
 60  
 gggctgggag aatgatacta agacaccaga catcacatcc attgctccca tccccactat  
 120  
 tgctgaaggc gatgagtctg tatttgtaa ctccaattca aacagctcga tggcgcctcc  
 180  
 tgtcctggag aacaatgctg ttgatctcac tgatgggctg acagatttgg aatcctatat  
 240  
 gaggtttctt atggatggcg gngcaagtga ttcaattgat agccttctga accttgatgg  
 300  
 atcacaggat cttggtagca atatggacct ctggaccttc gatgacatgc ccatcgctgg  
 360  
 cgatttn  
 367

<210> 1884  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 1884  
 Met Asn Leu His Ser Asp Gln Gly Ser Asn Ser Leu Gly Cys Ser Asp  
 1 5 10 15  
 Leu Gly Trp Glu Asn Asp Thr Lys Thr Pro Asp Ile Thr Ser Ile Ala  
 20 25 30  
 Pro Ile Pro Thr Ile Ala Glu Gly Asp Glu Ser Val Phe Val Asn Ser  
 35 40 45  
 Asn Ser Asn Ser Ser Met Val Pro Pro Val Leu Glu Asn Asn Ala Val  
 50 55 60  
 Asp Leu Thr Asp Gly Leu Thr Asp Leu Glu Ser Tyr Met Arg Phe Leu  
 65 70 75 80  
 Met Asp Gly Gly Ala Ser Asp Ser Ile Asp Ser Leu Leu Asn Leu Asp  
 85 90 95  
 Gly Ser Gln Asp Leu Gly Ser Asn Met Asp Leu Trp Thr Phe Asp Asp  
 100 105 110  
 Met Pro Ile Ala Gly Asp Xaa  
 115

<210> 1885  
 <211> 392  
 <212> DNA  
 <213> Homo sapiens

<400> 1885  
 nacgcgtatt cgcaaagaat gtctttgcgg cacagagaca gtcgtcgtcc tcgacaccat  
 60

gttcgacgat ctcggcatgt tgggaacccg gtgatttctc gcctgcggcg cacctcgtgg  
 120  
 ctgcgtagta cagctgctgt tgccgccggg gccgcgaccg gtaccggggtt ccaaccactg  
 180  
 aactggtgga tcctcgtcat tcccgggtctc gctgcgctca tcctgctggt gcgcaacgcc  
 240  
 actggtcggg ccgcggcagg actgggggtat ctcttcggca tcggtctggt taccaccacc  
 300  
 atttctggg taggcgtcat cggcccgccg gtggcgatac ttctcatcgc tgtcatggcg  
 360  
 ttgtggtgtc tgctggccgg gtggacgatt cg  
 392

<210> 1886

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1886

Xaa	Ala	Tyr	Ser	Gln	Arg	Met	Ser	Leu	Arg	His	Arg	Asp	Ser	Arg	Arg
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Pro	Arg	His	His	Val	Arg	Arg	Ser	Arg	His	Val	Gly	Asn	Pro	Val	Ile
			20				25					30			
Ser	Arg	Leu	Arg	Arg	Thr	Ser	Trp	Leu	Arg	Ser	Thr	Ala	Ala	Val	Ala
		35				40					45				
Ala	Gly	Ala	Ala	Thr	Gly	Thr	Gly	Phe	Gln	Pro	Leu	Asn	Trp	Trp	Ile
	50				55				60						
Leu	Val	Ile	Pro	Gly	Leu	Ala	Ala	Leu	Ile	Leu	Leu	Val	Arg	Asn	Ala
65				70				75				80			
Thr	Gly	Arg	Ala	Ala	Ala	Gly	Leu	Gly	Tyr	Leu	Phe	Gly	Ile	Gly	Leu
			85			90						95			
Phe	Thr	Thr	Thr	Ile	Ser	Trp	Val	Gly	Val	Ile	Gly	Pro	Pro	Val	Ala
			100			105					110				
Ile	Leu	Leu	Ile	Ala	Val	Met	Ala	Leu	Trp	Cys	Leu	Leu	Ala	Gly	Trp
		115				120					125				
Thr	Ile														
	130														

<210> 1887

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1887

cgcgagttca ttcggacctt tgaggacgtt gccaaagcgtc tcaatgggga ccagccgatac  
 60  
 gacttcttgg tgcaggggaac tttatatccc gatgtcgtcg agtctggtgg cggtgagggc  
 120  
 gctgccata tcaagagtca ccataatgtt ggtgggctcc ctgacgacct ccagttcagt  
 180  
 ctcgttgagc cattgcgcac cctctttaag gacgaggtgc gagccgtcgg actcgaactt  
 240  
 ggtctgcccc aggacatcgt ctggcgctcag cccttcccgg gcccggggct ggctatccgc  
 300

attattggcg aagtcaccgc ggagcgtctg gaggtgctac gcactgccga tgccatcacg  
 360  
 cgt  
 363

<210> 1888  
 <211> 121  
 <212> PRT  
 <213> Homo sapiens

<400> 1888  
 Arg Glu Phe Ile Arg Thr Phe Glu Asp Val Ala Lys Arg Leu Asn Gly  
 1 5 10 15  
 Asp Gln Pro Ile Asp Phe Leu Val Gln Gly Thr Leu Tyr Pro Asp Val  
 20 25 30  
 Val Glu Ser Gly Gly Gly Glu Gly Ala Ala Asn Ile Lys Ser His His  
 35 40 45  
 Asn Val Gly Gly Leu Pro Asp Asp Leu Gln Phe Ser Leu Val Glu Pro  
 50 55 60  
 Leu Arg Thr Leu Phe Lys Asp Glu Val Arg Ala Val Gly Leu Glu Leu  
 65 70 75 80  
 Gly Leu Pro Glu Asp Ile Val Trp Arg Gln Pro Phe Pro Gly Pro Gly  
 85 90 95  
 Leu Ala Ile Arg Ile Ile Gly Glu Val Thr Ala Glu Arg Leu Glu Val  
 100 105 110  
 Leu Arg Thr Ala Asp Ala Ile Thr Arg  
 115 120

<210> 1889  
 <211> 530  
 <212> DNA  
 <213> Homo sapiens

<400> 1889  
 gcaccagatc tgctcatggc gcgcattgcg acggcaacgc agtcgatccg gcttgggtct  
 60  
 ggtgggggtga tggccatgca ctacgggtcg ctgcaaatac cggaacgggtt ttcgaccctc  
 120  
 acagcgctct tcggtgatcg tatcgacatg gggctgggccc gggctcccgg cggtgacatg  
 180  
 ctctccgccc atgccctcaa tcagggggcag gtcattccgcc ctgaggccat taattccctc  
 240  
 atcgccgaaa cggtaggggtt cgtgcgcgaa atgctaccgt cgaagcatcc gtacgcaaag  
 300  
 gtcgtcgtga ccccggcagg tcagatccag ccacagacgt ggctgctggg atcgtcgggc  
 360  
 cagtcagcag cgtgggctgg tgagcagggt atggactacg cctacgcccga gtttttcacc  
 420  
 gggcgccagg acaccgggat catggatcac taccgcgcgc acctgtccga cggcttcccc  
 480  
 ggcaggaccc tctcagcagt gtgtgtatcg gctgctccga cgcgtccgga  
 530

<210> 1890

<211> 176  
 <212> PRT  
 <213> Homo sapiens

<400> 1890  
 Ala Pro Asp Leu Leu Met Ala Arg Ile Ala Thr Ala Thr Gln Ser Ile  
 1 5 10 15  
 Arg Leu Gly Ser Gly Gly Val Met Ala Met His Tyr Gly Ser Leu Gln  
 20 25 30  
 Ile Ala Glu Arg Phe Ser Thr Leu Thr Ala Leu Phe Gly Asp Arg Ile  
 35 40 45  
 Asp Met Gly Leu Gly Arg Ala Pro Gly Gly Asp Met Leu Ser Ala His  
 50 55 60  
 Ala Leu Asn Gln Gly Gln Val Ile Arg Pro Glu Ala Ile Asn Ser Leu  
 65 70 75 80  
 Ile Ala Glu Thr Val Gly Phe Val Arg Glu Met Leu Pro Ser Lys His  
 85 90 95  
 Pro Tyr Ala Lys Val Val Val Thr Pro Ala Gly Gln Ile Gln Pro Gln  
 100 105 110  
 Thr Trp Leu Leu Gly Ser Ser Gly Gln Ser Ala Ala Trp Ala Gly Glu  
 115 120 125  
 Gln Gly Met Asp Tyr Ala Tyr Ala Gln Phe Phe Thr Gly Arg Gln Asp  
 130 135 140  
 Thr Gly Ile Met Asp His Tyr Arg Ala His Leu Ser Asp Gly Phe Pro  
 145 150 155 160  
 Gly Arg Thr Leu Ser Ala Val Cys Val Ser Ala Ala Pro Thr Arg Pro  
 165 170 175

<210> 1891  
 <211> 423  
 <212> DNA  
 <213> Homo sapiens

<400> 1891  
 agatctcagg gagacagagg ggcccgggat aggaagaata tgtgggcacc tctccacag  
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 tcctccatct gcacaaggct acccactctg cagatggccc ctgcttgag agagatccag  
 120  
 cgtcaattta cagaggcagc ccagcttctt atcaactttc tggcctgggt taacggtgta  
 180  
 atgggcaggg ggcaaggcct tgaccacact catgtttctc ccccggcctc ctccactctg  
 240  
 ggattttgta ccggtatggg gaggcactac ggttgagat ttagcttttc agcgtggata  
 300  
 caagcaccca agtgtcccag accacagcag aaaccgtgtt gctgcggttt ccaacctgct  
 360  
 gatttgggtct cttgctgccg ttctgaccaa cagaattgct actgactgac aaatcccttg  
 420  
 tgc  
 423

<210> 1892  
 <211> 121  
 <212> PRT

<213> Homo sapiens

<400> 1892

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Met Trp Ala Pro Leu Pro Gln Ser Ser Ile Cys Thr Arg Leu Pro Thr
 1           5           10           15
Leu Gln Met Ala Pro Ala Cys Arg Glu Ile Gln Arg Gln Phe Thr Glu
          20           25           30
Ala Ala Gln Leu Pro Ile Asn Phe Leu Ala Trp Leu Asn Gly Val Met
          35           40           45
Gly Arg Gly Gln Gly Leu Asp His Thr His Val Ser Pro Pro Ala Ser
          50           55           60
Ser Thr Leu Gly Phe Cys Thr Gly Met Gly Arg His Tyr Gly Cys Arg
65           70           75           80
Phe Ser Phe Ser Ala Trp Ile Gln Ala Pro Lys Cys Pro Arg Pro Gln
          85           90           95
Gln Lys Pro Cys Cys Arg Phe Gln Pro Ala Asp Leu Val Ser Cys
          100          105          110
Cys Arg Ser Asp Gln Gln Asn Cys Tyr
          115          120

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<210> 1893

<211> 886

<212> DNA

<213> Homo sapiens

<400> 1893

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accggtggtg ctgaaccggc ccgagttgcc cttcctagcc ggatatacgt cgagggacgt
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catgacgctg aactcgtcga aaagatatgg ggcgacgacc tgcgccacgt cggggtcggt
120
gtggaataca tgggtggcat ggacgacctc gtcgggatcg tcgccgagtt taagcctggt
180
ccggggcatc gccttggcgt gttggttgac cacctcgttg ccgacaccaa agagtcacgg
240
gtagcggacg aagtacgtcg tgggtgggtat agcgagtatg tcatgattac cggtcacgcg
300
tttattgaca tctggcaggc catcaaactt caacgaattg gccgtcaaga atggcctgag
360
gtcccgatgg acgaagactt caaactcggc accctgaagc gtctgggcct gcctcactcg
420
accaagctg acgtcggtta ggctggcag gccatgctgg cagcagtgcg cgactggcac
480
gatttagacc cccgctttaa cacggagatg gagaaactta tcgatttcgt cacgcgtgac
540
catgtcgacg agctggacaa tggggagatg gcatgagtat tgacgtcgac acggtgtctg
600
acctcatccg ggatgtgagt gccagggtta tcgatccccg gttccggacc ctccacgatc
660
atcaaatacca ccagaaaaag cccggggact tcgttactga tgccgatcgt caggccgagt
720
gcgagctggg tgccgctgtg accaagtatg ccggcggtat tgtcgtgggg gaggaatcag
780
ccttcgccga cccaaccatc cttgatgccg tttccgatgc tgacctggcc tgggtcatcg
840

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acccattga tggcactaag aacttcgtgc acgggtctgt tgatca  
886

<210> 1894  
<211> 191  
<212> PRT  
<213> Homo sapiens

<400> 1894  
Thr Gly Gly Ala Glu Pro Ala Arg Val Ala Leu Pro Ser Arg Ile Tyr  
1 5 10 15  
Val Glu Gly Arg His Asp Ala Glu Leu Val Glu Lys Ile Trp Gly Asp  
20 25 30  
Asp Leu Arg His Val Gly Val Val Val Glu Tyr Met Gly Gly Met Asp  
35 40 45  
Asp Leu Val Gly Ile Val Ala Glu Phe Lys Pro Gly Pro Gly His Arg  
50 55 60  
Leu Gly Val Leu Val Asp His Leu Val Ala Asp Thr Lys Glu Ser Arg  
65 70 75 80  
Val Ala Asp Glu Val Arg Arg Gly Gly Tyr Ser Glu Tyr Val Met Ile  
85 90 95  
Thr Gly His Arg Phe Ile Asp Ile Trp Gln Ala Ile Lys Pro Gln Arg  
100 105 110  
Ile Gly Arg Gln Glu Trp Pro Glu Val Pro Met Asp Glu Asp Phe Lys  
115 120 125  
Leu Gly Thr Leu Lys Arg Leu Gly Leu Pro His Ser Thr Gln Ala Asp  
130 135 140  
Val Gly Lys Ala Trp Gln Ala Met Leu Ala Arg Val Arg Asp Trp His  
145 150 155 160  
Asp Leu Asp Pro Arg Phe Asn Thr Glu Met Glu Lys Leu Ile Asp Phe  
165 170 175  
Val Thr Arg Asp His Val Asp Glu Leu Asp Asn Gly Glu Met Ala  
180 185 190

<210> 1895  
<211> 2555  
<212> DNA  
<213> Homo sapiens

<400> 1895  
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2040

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<210> 1896  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 1896  
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 20 25 30  
 Glu Ser Met Val Glu Tyr Gly Thr Cys Met Cys Leu Val Lys Gly Ile  
 35 40 45  
 Phe Tyr His Cys Ser Asn Asp Asp Glu Gly Asp Ser Tyr Ser Asp Asn  
 50 55 60  
 Pro Cys Ser Cys Ser Gln Ser His Cys Cys Ser Arg Tyr Leu Cys Met  
 65 70 75 80  
 Gly Ala Met Ser Leu Phe Leu Pro Cys Leu Leu Cys Tyr Pro Pro Ala  
 85 90 95  
 Lys Gly Cys Leu Lys Leu Cys Arg Arg Cys Tyr Asp Trp Ile His Arg  
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 115 120 125  
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<210> 1897  
 <211> 938  
 <212> DNA  
 <213> Homo sapiens

<400> 1897  
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 938

&lt;210&gt; 1898

&lt;211&gt; 312

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1898

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		20						25				30			
Thr	Asp	Cys	Gly	Lys	Gly	Phe	Gly	His	Ala	Ser	Ser	Leu	Ser	Lys	His
		35					40					45			
Arg	Ala	Ile	His	Arg	Gly	Glu	Arg	Pro	His	Arg	Cys	Leu	Glu	Cys	Gly
	50					55					60				
Arg	Ala	Phe	Thr	Gln	Arg	Ser	Ala	Leu	Thr	Ser	His	Leu	Arg	Val	His
65				70					75					80	
Thr	Gly	Glu	Lys	Pro	Tyr	Gly	Cys	Ala	Asp	Cys	Gly	Arg	Arg	Phe	Ser
			85					90						95	
Gln	Ser	Ser	Ala	Leu	Tyr	Gln	His	Arg	Arg	Val	His	Ser	Gly	Glu	Thr
			100					105					110		
Pro	Phe	Pro	Cys	Pro	Asp	Cys	Gly	Arg	Ala	Phe	Ala	Tyr	Pro	Ser	Asp
		115					120					125			
Leu	Arg	Arg	His	Val	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Pro	Cys
	130					135					140				
Pro	Asp	Cys	Gly	Arg	Arg	Phe	Ser	Ser	Ser	Ser	Leu	Leu	Val	Ser	His

145					150					155					160	
Arg	Arg	Ala	His	Ser	Gly	Glu	Cys	Pro	Tyr	Val	Cys	Asp	Gln	Cys	Gly	
				165					170					175		
Lys	Arg	Phe	Ser	Gln	Arg	Lys	Asn	Leu	Ser	Gln	His	Gln	Val	Ile	His	
				180					185					190		
Thr	Gly	Glu	Lys	Pro	Tyr	His	Cys	Pro	Asp	Cys	Gly	Arg	Cys	Phe	Arg	
				195					200					205		
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				210					215					220		
Pro	His	Gln	Cys	Pro	Ser	Cys	Gly	Arg	Arg	Phe	Ala	Tyr	Pro	Ser	Leu	
225					230					235					240	
Leu	Ala	Ser	His	Arg	Arg	Val	His	Ser	Gly	Glu	Arg	Pro	Tyr	Ala	Cys	
				245					250					255		
Asp	Leu	Cys	Ser	Lys	Arg	Phe	Ala	Gln	Trp	Ser	His	Leu	Ala	Gln	His	
				260					265					270		
Gln	Leu	Leu	His	Thr	Gly	Glu	Lys	Pro	Phe	Pro	Cys	Leu	Glu	Cys	Gly	
				275					280					285		
Arg	Ala	Ser	Ala	Arg	Gly	Gly	Leu	Trp	Leu	Ser	Thr	Ser	Val	Ala	Pro	
				290					295					300		
Arg	Pro	Gln	Thr	Val	Ala	Leu	Asp									
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<210> 1899
<211> 508
<212> DNA
<213> Homo sapiens
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120
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240
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gatgcagagt gtcttcctcg gactgaactg gaaaccaagt taaaaagcct ggagagcttc
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420
gatgtgtcgg tgaccgtcgg catggacagc cgctgccaca tcgacctgag cggcatcgtg
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508
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<210> 1900
<211> 79
<212> PRT
<213> Homo sapiens
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<400> 1900  
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Gln	Leu	Leu	Glu	Thr	Arg	Trp	Ser	Phe	Leu	Gln	Gly	Gln	Asp	Ser	Ala
		20						25					30		
Ile	Phe	Asp	Leu	Gly	His	Leu	Tyr	Glu	Glu	Ile	Ser	Gly	Arg	Leu	Arg
		35					40					45			
Arg	Glu	Leu	Gly	Gln	Arg	Asp	Arg	Asn	Arg	Gly	Gln	Leu	Glu	Ala	Thr
	50					55					60				
Leu	Leu	Gln	Val	Leu	Lys	Lys	Val	Glu	Glu	Phe	Arg	Ile	Arg	Tyr	
65					70					75					

&lt;210&gt; 1901

&lt;211&gt; 453

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1901

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60
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120
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180
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240
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300
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360
cgctcaccga ttccatcgcc gacgagggca acgcttagcg acgccagcgc caccgagttt
420
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453

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&lt;210&gt; 1902

&lt;211&gt; 151

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1902

Thr	Arg	Gly	Pro	Arg	Cys	Ala	Gly	Ser	Gly	Ser	Ala	Pro	Cys	Thr	Pro
1					5				10				15		
Arg	Thr	Trp	Arg	Arg	Cys	Ser	Ala	Met	Arg	Arg	Gln	Pro	Ala	Leu	Pro
		20					25					30			
Ser	Ser	Thr	Arg	Ser	Ser	Arg	Ala	Arg	Asn	Ser	Thr	Arg	Ser	Ala	Pro
		35				40					45				
Pro	Cys	Ser	Ser	Thr	Gly	Ala	Pro	Ser	Ser	Thr	Thr	Arg	Ile	Arg	Ala
	50				55					60					
Arg	Ser	Gly	Arg	Ser	Thr	Val	Ser	Ala	Ala	Thr	Arg	Ser	Pro	Ala	Ala
65				70					75					80	
Arg	Pro	Arg	Ser	Ser	Arg	Arg	Ser	Pro	Pro	Trp	Ser	Thr	Thr	Pro	Arg
			85				90						95		
Arg	Arg	Ser	Ala	Ala	Arg	Gly	Arg	Ala	Leu	Thr	Cys	Ala	Asn	Gly	Ala
		100				105					110				
Cys	Thr	Gly	Arg	Thr	Trp	Trp	Lys	Arg	Ser	Pro	Ile	Pro	Ser	Pro	Thr

	115		120		125
Arg	Ala Thr Leu Ser Asp	Ala Ser Ala Thr Glu	Phe Arg Glu Met Lys		
	130	135	140		
Glu	Ile Leu Ile Glu Gly Gly				
145		150			

<210> 1903  
 <211> 531  
 <212> DNA  
 <213> Homo sapiens

<400> 1903  
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 420  
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 531

<210> 1904  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 1904  
 Pro Ala Arg Glu Leu Phe Arg Asp Ala Ala Phe Pro Ala Ala Asp Ser  
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 Ile Thr Trp Arg Arg Pro Gln Arg Ile Cys Ala Asn Pro Arg Leu Phe  
 35 40 45  
 Pro Asn Asp Gln Arg Glu Gly Gln Val Lys Gln Gly Leu Leu Gly Asp  
 50 55 60  
 Cys Trp Phe Leu Cys Ala Cys Ala Ala Leu Gln Lys Ser Arg His Leu  
 65 70 75 80  
 Leu Asp Gln Val Ile Pro Ala Gly Gln Pro Ser Trp Ala Asp Gln Glu  
 85 90 95  
 Tyr Arg Gly Ser Phe Thr Cys Arg Phe Trp Gln Phe Gly Arg Trp Val  
 100 105 110  
 Glu Gly Pro Trp Val Pro Ser Ser Pro Cys Gly Arg Gly Arg Trp Arg  
 115 120 125  
 Met Pro Trp Trp Thr

130

<210> 1905  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

<400> 1905  
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 120  
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 180  
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 240  
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 300  
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 360  
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 387

<210> 1906  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 1906  
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 Arg Arg Val Leu Leu Ala Ser Phe Leu Leu Ala Ala Val Arg Trp Leu  
 35 40 45  
 Leu Leu Gly Ala Leu Ala Asp His Leu Ala Val Leu Leu Phe Ala Gln  
 50 55 60  
 Val Leu His Ala Ala Thr Phe Ala Ser Phe His Ala Ser Ala Ile His  
 65 70 75 80  
 Phe Val Gln Arg Ser Phe Gly Ala Arg Xaa Ala Arg Pro Gly Gln Ala  
 85 90 95  
 Leu Tyr Ala Ala Leu Ala Gly Thr Gly Gly Ala Leu Gly Ala Leu Tyr  
 100 105 110  
 Ala Gly Tyr Ser Trp Asn Ser Leu Gly Pro Thr Trp Thr Phe Ser Ile  
 115 120 125  
 Val

<210> 1907  
 <211> 333  
 <212> DNA  
 <213> Homo sapiens

<400> 1907



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 180  
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 240  
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<210> 1908

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1908

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Gly	Phe	Asp	Lys	Lys	Leu	Arg	Ala	Ala	Arg	Arg	Glu	Thr	Leu	Glu	Met
			20					25					30		
Cys	Val	Asn	Asp	Leu	Phe	Pro	Gly	Gly	Gly	Asp	Thr	Ser	Lys	Ala	Thr
		35					40					45			
Phe	Trp	Thr	Gly	Leu	Arg	Pro	Met	Thr	Pro	Asp	Gly	Thr	Pro	Ile	Val
	50					55				60					
Gly	Arg	Thr	Pro	Val	Ser	Asn	Leu	Phe	Leu	Asn	Thr	Gly	His	Gly	Thr
65					70					75				80	
Leu	Gly	Trp	Thr	Met	Val	Cys	Gly	Ser	Gly	Gln	Leu	Leu	Ala	Asp	Leu
				85					90					95	
Ile	Ser	Gly	Lys	Met	Pro	Ala	Ile	Gln	Ala	Asp	Asp	Leu	Ser	Xaa	
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<210> 1909

<211> 2767

<212> DNA

<213> Homo sapiens

<400> 1909

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 120  
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 180  
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 300  
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 360  
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1920  
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1980  
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2040

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 2160  
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<210> 1910

<211> 669

<212> PRT

<213> Homo sapiens

<400> 1910

Met	Lys	Ile	Phe	Val	Gly	Asn	Val	Asp	Gly	Ala	Asp	Thr	Thr	Pro	Glu
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Glu	Leu	Ala	Ala	Leu	Phe	Ala	Pro	Tyr	Gly	Thr	Val	Met	Ser	Cys	Ala
		20						25					30		
Val	Met	Lys	Gln	Phe	Ala	Phe	Val	His	Met	Arg	Glu	Asn	Ala	Gly	Ala
		35						40					45		
Leu	Arg	Ala	Ile	Glu	Ala	Leu	His	Gly	His	Glu	Leu	Arg	Pro	Gly	Arg
	50					55					60				
Ala	Leu	Val	Val	Glu	Met	Ser	Arg	Pro	Arg	Pro	Leu	Asn	Thr	Trp	Lys
65					70					75					80
Ile	Phe	Val	Gly	Asn	Val	Ser	Ala	Ala	Cys	Thr	Ser	Gln	Glu	Leu	Arg
			85						90					95	
Ser	Leu	Phe	Glu	Arg	Arg	Gly	Arg	Val	Ile	Glu	Cys	Asp	Val	Val	Lys
		100						105					110		
Asp	Tyr	Ala	Phe	Val	His	Met	Glu	Lys	Glu	Ala	Asp	Ala	Lys	Ala	Ala
		115					120					125			
Ile	Ala	Gln	Leu	Asn	Gly	Lys	Glu	Val	Lys	Gly	Lys	Arg	Ile	Asn	Val
		130				135					140				
Glu	Leu	Ser	Thr	Lys	Gly	Gln	Lys	Lys	Gly	Pro	Gly	Leu	Ala	Val	Gln
145						150				155					160
Ser	Gly	Asp	Lys	Thr	Lys	Lys	Pro	Gly	Ala	Gly	Asp	Thr	Ala	Phe	Pro

				165				170					175				
Gly	Thr	Gly	Gly	Phe	Ser	Ala	Thr	Phe	Asp	Tyr	Gln	Gln	Ala	Phe	Gly		
			180					185					190				
Asn	Ser	Thr	Gly	Gly	Phe	Asp	Gly	Gln	Ala	Arg	Gln	Pro	Thr	Pro	Pro		
		195					200					205					
Phe	Phe	Gly	Arg	Asp	Arg	Ser	Pro	Leu	Arg	Arg	Ser	Pro	Pro	Arg	Ala		
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Ser	Tyr	Val	Ala	Pro	Leu	Thr	Ala	Gln	Pro	Ala	Thr	Tyr	Arg	Ala	Gln		
225					230					235					240		
Pro	Ser	Val	Ser	Leu	Gly	Ala	Ala	Tyr	Arg	Ala	Gln	Pro	Ser	Ala	Ser		
				245				250						255			
Leu	Gly	Val	Gly	Tyr	Arg	Thr	Gln	Pro	Met	Thr	Ala	Gln	Ala	Ala	Ser		
			260					265					270				
Tyr	Arg	Ala	Gln	Pro	Ser	Val	Ser	Leu	Gly	Ala	Pro	Tyr	Arg	Gly	Gln		
	275						280					285					
Leu	Ala	Ser	Pro	Ser	Ser	Gln	Ser	Ala	Ala	Ala	Ser	Ser	Leu	Gly	Pro		
	290					295					300						
Tyr	Gly	Gly	Ala	Gln	Pro	Ser	Ala	Ser	Ala	Leu	Ser	Ser	Tyr	Gly	Gly		
305					310					315					320		
Gln	Ala	Ala	Ala	Ala	Ser	Ser	Leu	Asn	Ser	Tyr	Gly	Ala	Gln	Gly	Ser		
				325				330						335			
Ser	Leu	Ala	Ser	Tyr	Gly	Asn	Gln	Pro	Ser	Ser	Tyr	Gly	Ala	Gln	Ala		
			340					345					350				
Ala	Ser	Ser	Tyr	Gly	Val	Arg	Ala	Ala	Ala	Ser	Ser	Tyr	Asn	Thr	Gln		
	355						360					365					
Gly	Ala	Ala	Ser	Ser	Leu	Gly	Ser	Tyr	Gly	Ala	Gln	Ala	Ala	Ser	Tyr		
	370					375					380						
Gly	Ala	Gln	Ser	Ala	Ala	Ser	Ser	Leu	Ala	Tyr	Gly	Ala	Gln	Ala	Ala		
385					390					395					400		
Ser	Tyr	Asn	Ala	Gln	Pro	Ser	Ala	Ser	Tyr	Asn	Ala	Gln	Ser	Ala	Pro		
				405					410					415			
Tyr	Ala	Ala	Gln	Gln	Ala	Ala	Ser	Tyr	Ser	Ser	Gln	Pro	Ala	Ala	Tyr		
			420					425					430				
Val	Ala	Gln	Pro	Ala	Thr	Ala	Ala	Ala	Tyr	Ala	Ser	Gln	Pro	Ala	Ala		
	435							440				445					
Tyr	Ala	Ala	Gln	Ala	Thr	Thr	Pro	Met	Ala	Gly	Ser	Tyr	Gly	Ala	Gln		
	450					455				460							
Pro	Val	Val	Gln	Thr	Gln	Leu	Asn	Ser	Tyr	Gly	Ala	Gln	Ala	Ser	Met		
465					470					475					480		
Gly	Leu	Ser	Gly	Ser	Tyr	Gly	Ala	Gln	Ser	Ala	Ala	Ala	Ala	Thr	Gly		
				485					490					495			
Ser	Tyr	Gly	Ala	Ala	Ala	Ala	Tyr	Gly	Ala	Gln	Pro	Ser	Ala	Thr	Leu		
			500					505					510				
Ala	Ala	Pro	Tyr	Arg	Thr	Gln	Ser	Ser	Ala	Ser	Leu	Ala	Ala	Ser	Tyr		
		515					520					525					
Ala	Ala	Gln	Gln	His	Pro	Gln	Ala	Ala	Ala	Ser	Tyr	Arg	Gly	Gln	Pro		
		530				535					540						
Gly	Asn	Ala	Tyr	Asp	Gly	Ala	Gly	Gln	Pro	Ser	Ala	Ala	Tyr	Leu	Ser		
545					550					555					560		
Met	Ser	Gln	Gly	Ala	Val	Ala	Asn	Ala	Asn	Ser	Thr	Pro	Pro	Pro	Tyr		
				565					570					575			
Glu	Arg	Thr	Arg	Leu	Ser	Pro	Pro	Arg	Ala	Ser	Tyr	Asp	Asp	Pro	Tyr		
			580					585					590				
Lys	Lys	Ala	Val	Ala	Met	Ser	Lys	Arg	Tyr	Gly	Ser	Asp	Arg	Arg	Leu		

595	600	605
Ala Glu Leu Ser Asp Tyr Arg Arg Leu Ser Glu Ser Gln Leu Ser Phe		
610	615	620
Arg Arg Ser Pro Thr Lys Ser Ser Leu Asp Tyr Arg Arg Leu Pro Asp		
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Ala His Ser Asp Tyr Ala Arg Tyr Ser Gly Ser Tyr Asn Asp Tyr Leu		
645	650	655
Arg Ala Ala Gln Met His Ser Gly Tyr Gln Arg Arg Met		
660	665	

<210> 1911  
 <211> 339  
 <212> DNA  
 <213> Homo sapiens

<400> 1911  
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 120  
 cgcacgcacg atgaaagctt cctccgccca gttgagccga cccaagccgc accgtgggagc  
 180  
 gcagcgcata gccagcaggc gtggtggaat cacctgaagt acctgcgcac cgccgcgcgt  
 240  
 gaagcactgg tgggtcccgct cgtcattgag gtggagggga aattcgcagg gcaggtaacc  
 300  
 ctgggaaaca ttcagcatgg cagcattcgc gattgctgg  
 339

<210> 1912  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 1912  
 Xaa Gly Trp Pro Glu Ser Thr Pro Ser Val Gln Leu Pro Ser Ser Ser  
 1 5 10 15  
 Val Phe Pro Ser Gly Ala Arg Met Arg Leu Arg Pro Leu Leu Arg Ser  
 20 25 30  
 Asp Gly His Glu Trp Arg Arg Gln Arg Ile Asp Asp Glu Ser Phe Leu  
 35 40 45  
 Arg Pro Val Glu Pro Thr Gln Ala Ala Pro Trp Ala Ala Ala His Ser  
 50 55 60  
 Gln Gln Ala Trp Trp Asn His Leu Lys Tyr Leu Arg Thr Ala Ala Arg  
 65 70 75 80  
 Glu Ala Leu Val Val Pro Leu Val Ile Glu Val Glu Gly Lys Phe Ala  
 85 90 95  
 Gly Gln Val Thr Leu Gly Asn Ile Gln His Gly Ser Ile Arg Asp Cys  
 100 105 110  
 Trp

<210> 1913  
 <211> 767

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1913

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atgcgaaatg ggggatttgt caccctcagg gaccggaagg aaggagcag tccgatggca
120
gcgccagtac tcgatctcgt cctcccagcc ttgtccgaaa cctccgcaa tctcatcggc
180
cagaggttgc gccagggatg tcacacctcc atccccacat cgaatctacg gtgagcttcg
240
tcccagctgt cgggcagtac aaggcacctc ggatcaagct ttcctggcgt gaactgggcc
300
tggtacccat caatgccacc cacctgcact ccaatcccc acaagttgtc caacacgccg
360
cagaattgcy tcgcagccac ccggaccttg ccatcaaggt ggcccgcgcc accggaccag
420
caccggtcct cctcaacctc gtcgatacgc gattgcgtct ggcagctcat cgcgtccatg
480
cccaggagct ggactcactc gtattgtctt cccctgatgg cggcgattta cgtggctcgg
540
caatgctgtc caggctgacc cggctgtggg cccagcacca ccaccttcg gtccgcatcg
600
ccaccaatcg tgggtggggct actgcggctc aggaggtcgt cggccgcctg cgacaggagg
660
ggcgccgtca tatcgcagtg ggaagcctgt ggatttgca cgacgagaat ttccgcattc
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atactcgcca ggctttgcat gccggtgccg aggttgctgc cgcaccg
767

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&lt;210&gt; 1914

&lt;211&gt; 190

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1914

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Met Ser His Leu His Pro His Ile Glu Ser Thr Val Ser Phe Val Pro
1          5          10          15
Ala Val Gly Gln Tyr Lys Ala Pro Arg Ile Lys Leu Ser Trp Arg Glu
20          25          30
Leu Val Leu Val Pro Ile Asn Ala Thr His Leu His Ser Asn Pro Pro
35          40          45
Gln Val Val Gln His Ala Ala Glu Leu Arg Arg Ser His Pro Asp Leu
50          55          60
Ala Ile Lys Val Ala Arg Pro Thr Gly Pro Ala Pro Val Leu Leu Asn
65          70          75          80
Leu Val Asp Thr Arg Leu Arg Leu Ala Ala His Arg Val His Ala Gln
85          90          95
Glu Leu Asp Ser Leu Val Leu Ser Ser Pro Asp Gly Gly Asp Leu Arg
100         105         110
Gly Ser Ala Met Leu Ser Arg Leu Thr Arg Leu Trp Ser Gln His His
115         120         125
His Leu Pro Val Arg Ile Ala Thr Asn Arg Gly Gly Ala Thr Ala Val

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130	135	140
Glu Glu Val Val Ala Arg Leu Arg Gln Glu Gly Arg Arg His Ile Ala		
145	150	155
Val Gly Ser Leu Trp Ile Cys Asp Asp Glu Asn Phe Arg Ile His Thr		160
	165	170
Arg Gln Ala Leu His Ala Gly Ala Glu Val Val Ala Ala Pro		175
	180	185
		190

<210> 1915  
 <211> 571  
 <212> DNA  
 <213> Homo sapiens

<400> 1915  
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 aggtgtgagc gcacgatggg cagtcacgcc gcacacacgc tctgctcatg tccctcccca  
 120  
 ggaccctctg accgggcaca agggcagctg tgaggacaag gccacagcca caaaccaacc  
 180  
 tggcacacac ggctcagggc gaggcactgc cccatggggc tgcattgatcc acgtcacag  
 240  
 gtgtcattgt ctatgctcag gggggcttgg caccatggga aaccacacca gaacacatgg  
 300  
 agaagccaca gcacaacctc agcgcccgcc atgcaggacc ctgggtctca cccattgcac  
 360  
 ccaccgtgcg ggacccttgc gctcaccgc gaacatccac agtgtgggac tgctgcgtct  
 420  
 caccactgc acctgccgtg caggatccct gagtctcacc cgccgcaccc gccgtgcggg  
 480  
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 540  
 gcgtctcacc caccgcaccc gccgtgcggg a  
 571

<210> 1916  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 1916  
 Met Gly Leu His Asp Pro Arg Ser Gln Val Ser Leu Ser Met Leu Arg  
 1 5 10 15  
 Gly Ala Trp His Gly Lys Pro Thr Gln Asn Thr Trp Arg Ser His  
 20 25 30  
 Ser Thr Thr Ser Ala Pro Ala Met Gln Asp Pro Gly Ser His Pro Leu  
 35 40 45  
 His Pro Pro Cys Gly Thr Pro Ala Pro His Pro Glu His Pro Gln Cys  
 50 55 60  
 Gly Thr Ala Ala Ser His Pro Leu His Leu Pro Cys Arg Ile Pro Glu  
 65 70 75 80  
 Ser His Pro Pro His Pro Pro Cys Gly Ile Pro Glu Ser His Pro Pro  
 85 90 95  
 His Pro Pro Tyr Leu Pro His Pro Pro Cys Gly Thr Pro Ala Ser His

100  
Pro Pro His Pro Pro Cys Gly  
115

105

110

<210> 1917  
<211> 360  
<212> DNA  
<213> Homo sapiens

<400> 1917  
nnacgcgtga cgggcgaaga tctccgcacc ctatctgccg ggtacacgcc ggggtgattcc  
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gatatgtctt gggctgccat caccttgtgg cgcggtgtcg ttgcctccgc cttggaccgt  
120  
catccctatg gcccggtgaa gtcggtaaag gtagcaggtc cggccggcca cccagccccg  
180  
gatttcgccg ccggatgggt gtcgcaccgc ttggcagttc ccgtacatcg cacagtggcc  
240  
gactccccaa ggagacactt cccggtgact catttgagcgt tcaatcgga gacaaccac  
300  
gtagacgtcg atgtcattga cgagcgcacg gttcgtgtat gtgttcggg ttcgccggaa  
360

<210> 1918  
<211> 120  
<212> PRT  
<213> Homo sapiens

<400> 1918  
Xaa Arg Val Thr Gly Glu Asp Leu Arg Thr Leu Ser Ala Gly Tyr Thr  
1 5 10 15  
Pro Gly Asp Ser Asp Met Ser Trp Ala Ala Ile Thr Leu Trp Arg Gly  
20 25 30  
Val Val Ala Ser Ala Leu Asp Arg His Pro Tyr Gly Pro Val Lys Ser  
35 40 45  
Val Lys Val Ala Gly Pro Ala Gly His Pro Ala Pro Asp Phe Ala Ala  
50 55 60  
Gly Trp Leu Leu Asp Arg Leu Ala Val Pro Val His Arg Thr Val Ala  
65 70 75 80  
Asp Ser Pro Arg Arg His Phe Pro Val Thr His Leu Gln Phe Asn Arg  
85 90 95  
Glu Thr Thr His Val Asp Val Asp Val Ile Asp Glu Arg Thr Val Arg  
100 105 110  
Val Cys Val Pro Gly Ser Pro Glu  
115 120

<210> 1919  
<211> 354  
<212> DNA  
<213> Homo sapiens

<400> 1919  
nncggccgca gctgtgtcca ctgcgctgtc cctgccacct cggccatctg cctctctctt  
60



ccaggctgca gccatccctc ctgcactgct gaggcctggc cacgcgcata ncggccacgc  
 120  
 ccacctccat cctctttgcc ccttactaaa cactggggagc ccgccccgcc gcgacaggcc  
 180  
 aggccagcgg gaaggtgtag acgaacagcc caaaggattc agcagtgtaa gtacccacc  
 240  
 tacgcactta caaagtgcag gccaccgccc agccccacct ccagacacag gcggaggcca  
 300  
 agctcgcggg caccgtatca tcccgtagcg tctccaccct acccctgcca attg  
 354

<210> 1920

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1920

Xaa	Gly	Arg	Ser	Cys	Val	His	Cys	Ala	Val	Pro	Ala	Thr	Ser	Ala	Ile
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Cys	Leu	Ser	Leu	Pro	Gly	Cys	Ser	His	Pro	Ser	Cys	Thr	Ala	Glu	Ala
			20					25					30		
Trp	Pro	Arg	Ala	Ser	Arg	Pro	Arg	Pro	Pro	Pro	Ser	Ser	Leu	Pro	Leu
			35				40					45			
Thr	Lys	His	Trp	Glu	Pro	Ala	Arg	Pro	Arg	Gln	Ala	Arg	Pro	Ala	Gly
	50					55				60					
Arg	Cys	Arg	Arg	Thr	Ala	Gln	Arg	Ile	Gln	Gln	Cys	Lys	Tyr	Pro	Thr
65					70				75					80	
Tyr	Ala	Leu	Thr	Lys	Cys	Arg	Pro	Pro	Pro	Ser	Pro	Thr	Ser	Arg	His
				85					90					95	
Arg	Arg	Arg	Pro	Ser	Ser	Arg	Ala	Pro	Tyr	His	Pro	Val	Pro	Ser	Pro
			100					105					110		
Pro	Tyr	Pro	Cys	Gln	Leu										
			115												

<210> 1921

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1921

gaattcatct ggaggcagag agatgggggaa gcgggtggga gaagagcaag aacggaaact  
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 atttttaata caaatccagt catggtattg tatacacagc agcctctgtc ttccagaaac  
 120  
 ctacacggcc gccacaccaa agttaatgcc accaggcgtc atcacacaga tgtgaggtgc  
 180  
 aggtgccact ccacagccgt gggcagacct gggagcccag ctcctcctgg tttcacctc  
 240  
 cacactgccc accccatcct tctctcccag tctccactcc atcgaagcct cccagatgac  
 300  
 ttcattgtggg gacaggagaa ctacagatca tggctgagaa gggcgcngtg tngtcca  
 357

<210> 1922

<211> 92  
 <212> PRT  
 <213> Homo sapiens

<400> 1922  
 Met Val Leu Tyr Thr Gln Gln Pro Leu Ser Ser Arg Asn Leu His Gly  
 1 5 10 15  
 Arg His Thr Lys Val Asn Ala Thr Arg Arg His His Thr Asp Val Arg  
 20 25 30  
 Cys Arg Cys His Ser Thr Ala Val Gly Arg Pro Gly Ser Pro Ala Pro  
 35 40 45  
 Pro Gly Phe Thr Leu His Thr Ala His Pro Ile Leu Leu Ser Gln Ser  
 50 55 60  
 Pro Leu His Arg Ser Leu Pro Asp Asp Phe Met Trp Gly Gln Glu Asn  
 65 70 75 80  
 Tyr Arg Ser Trp Leu Arg Arg Ala Xaa Cys Xaa Pro  
 85 90

<210> 1923  
 <211> 368  
 <212> DNA  
 <213> Homo sapiens

<400> 1923  
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 ggtagtgcac agaagaaaga atgggttcagc aacattaaac tctcaggcta tggaatgacc  
 120  
 cagtatcaat atactgatca agaggggaagc aaaggccatt catttaatct gcgattgttc  
 180  
 ccgttgccctt taaacggacg tatcttaaata gacttttatt ggaaggcaca ggcccaattc  
 240  
 aatggaaaca catcgacatt gggaagcagt ccacgtcttg tagacctatt tgtagagtgg  
 300  
 cagaaatatg attattttcaa ggtgaagtta ggccagttta agcgaccatt cacgtttgaa  
 360  
 aatcccag  
 368

<210> 1924  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 1924  
 Met Val Arg Lys Gly Leu Cys Val Ala Leu Leu Val Leu Val Thr Leu  
 1 5 10 15  
 Ser Gly Ser Ala Gln Lys Lys Glu Trp Phe Ser Asn Ile Lys Leu Ser  
 20 25 30  
 Gly Tyr Gly Met Thr Gln Tyr Gln Tyr Thr Asp Gln Glu Gly Ser Lys  
 35 40 45  
 Gly His Ser Phe Asn Leu Arg Leu Phe Pro Leu Pro Leu Asn Gly Arg  
 50 55 60  
 Ile Leu Asn Asp Phe Tyr Trp Lys Ala Gln Ala Gln Phe Asn Gly Asn

```

65              70              75              80
Thr Ser Thr Leu Gly Ser Ser Pro Arg Leu Val Asp Leu Phe Val Glu
              85              90              95
Trp Gln Lys Tyr Asp Tyr Phe Lys Val Lys Leu Gly Gln Phe Lys Arg
              100              105              110
Pro Phe Thr Phe Glu Asn Pro
              115

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<210> 1925  
 <211> 427  
 <212> DNA  
 <213> Homo sapiens

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<400> 1925
actagtgttt ccagcaggca gcgatttaat tgttcttgca ttgaaacca gtgtggcaag
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ccccctgtg atttgaggct aatccctccc caccctgttc tggcacatgt gcggtgccca
120
gggctcccc caggctgtga gcagataaag ccctgcgtgg cttcacaaca gtgactgggt
180
ctgagaaaaca ggtccttgta caagcgacag ggagtgtctca caccagatgt ggcagcccct
240
ccacgccagg ctgtgtgggtg cagccgcctg gtatatgtgt ccatcgctga tgaaaacagc
300
gttgtgtggt gcatgactgt tgtctgtttt cttcatggaa acaaggaaac ctaagcatta
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aaacaacacc atccacgtct gggttccttag agcaaattgga agcaccaggc tctgggtgcac
420
ggcgcgc
427

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<210> 1926  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

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<400> 1926
Met His His Thr Thr Leu Phe Ser Ser Ala Met Asp Thr Tyr Thr Arg
1              5              10              15
Arg Leu His His Thr Ala Trp Arg Gly Gly Ala Ala Thr Ser Gly Val
              20              25              30
Ser Thr Pro Cys Arg Leu Tyr Lys Asp Leu Phe Leu Arg Thr Ser His
              35              40              45
Cys Cys Glu Ala Thr Gln Gly Phe Ile Cys Ser Gln Pro Gly Gly Ser
              50              55              60
Pro Gly His Arg Thr Cys Ala Arg Thr Gly Trp Gly Gly Ile Ser Leu
65              70              75              80
Lys Ser Gln Gly Gly Leu Pro His Trp Val Ser Met Gln Glu Gln Leu
              85              90              95
Asn Arg Cys Leu Leu Glu Thr Leu
              100

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<210> 1927  
 <211> 516

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1927

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 60  
 acatctgctt tgacgggtgga ggcaaccagt agcatcaggg aaaaagttgt tgaagatcct  
 120  
 ctttgtaact tccactcccc aaacttcctg aggatctcag aggtggaaat gagaggttcc  
 180  
 gaggatgcgg cagctggaac agtattgcag cggctgatcc aggaacaact gcggtatggc  
 240  
 accccaaccg agaacatgaa cttgctggcc attcagcacc aggccacagg gagtgcagga  
 300  
 ccagcccatc ctacaaacaa cttttcttcc acggaaaacc tcaactcaaga agaccacaa  
 360  
 atggtctacc agtcagcacg ccaagaaccg caggggtcaag aacaccagng tgganncaat  
 420  
 acggtgatgg agaaacaggt ccggtccacg cagcctcagc agaacaacga ggaactgccc  
 480  
 acttacgagg aggccaaagc acagcccttc acgcgt  
 516

&lt;210&gt; 1928

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1928

Xaa	Leu	Glu	Asp	Ser	Thr	Tyr	Phe	Ser	Pro	Asp	Phe	Gln	Leu	Tyr	Ser
1				5					10					15	
Gly	Arg	His	Glu	Thr	Ser	Ala	Leu	Thr	Val	Glu	Ala	Thr	Ser	Ser	Ile
			20					25					30		
Arg	Glu	Lys	Val	Val	Glu	Asp	Pro	Leu	Cys	Asn	Phe	His	Ser	Pro	Asn
		35				40					45				
Phe	Leu	Arg	Ile	Ser	Glu	Val	Glu	Met	Arg	Gly	Ser	Glu	Asp	Ala	Ala
50						55					60				
Ala	Gly	Thr	Val	Leu	Gln	Arg	Leu	Ile	Gln	Glu	Gln	Leu	Arg	Tyr	Gly
65					70				75					80	
Thr	Pro	Thr	Glu	Asn	Met	Asn	Leu	Leu	Ala	Ile	Gln	His	Gln	Ala	Thr
				85					90					95	
Gly	Ser	Ala	Gly	Pro	Ala	His	Pro	Thr	Asn	Asn	Phe	Ser	Ser	Thr	Glu
			100					105					110		
Asn	Leu	Thr	Gln	Glu	Asp	Pro	Gln	Met	Val	Tyr	Gln	Ser	Ala	Arg	Gln
		115					120					125			
Glu	Pro	Gln	Gly	Gln	Glu	His	Gln	Xaa	Gly	Xaa	Asn	Thr	Val	Met	Glu
		130				135					140				
Lys	Gln	Val	Arg	Ser	Thr	Gln	Pro	Gln	Gln	Asn	Asn	Glu	Glu	Leu	Pro
145					150					155					160
Thr	Tyr	Glu	Glu	Ala	Lys	Ala	Gln	Pro	Phe	Thr	Arg				
				165					170						

&lt;210&gt; 1929

&lt;211&gt; 843

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1929

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nnccgcggac aotcagggtc tggggtcctt cttccccaag aggcctgact gcctgggtgt
60
tctccaggta catgtccttc aaggagaaat acacttcttg gcctgggcct gggccagggg
120
ccttctgggc cttgtctgga gtgcccacag cagaggtctg cttcctggta ctatctgtgc
180
cagaggaccc agggccccgt gcagccctgc ctctgggctg ggtctgaacc tgetccacgc
240
ccacggggccc ctgagtccca caggagtcag gctcgtctga gctggggatg cagttttctg
300
aagaacggcg gctttgggct gccttctcta actctggctt ccgcacctg cttggattcc
360
tcatctttct ttttcttctt gggcccactc tcctctttga gggctctctg agggcccagc
420
tccatggcgt cacagatgta tgtcagcaag ccatgctctc cgtcctctcc attctcgggg
480
gcagcctccc cgttgggtgg cacttctcca gaagcaaact gttgatcagg cccaaacctg
540
agtgtgagc agtctcagtc tctccctcct gccaaagccgc caggggccca cctcaggct
600
ccctggtagg gaccgagggg cccggcgctt gagccccgct caatcgccgc ttctcgtgga
660
agcggtcggg gctgagcttg cgcagagtgt cgacctcccc aggcaccgcc ttctcgtgct
720
tccagctctg ctgatctcg cgcagctttg ccgcagcctt gcgcttcaac ttggcgaacc
780
agcgtcgggt gatcttgtac tcagtcatgg tgcccacctc ccaggacctc gagcaggaca
840
caa
843

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&lt;210&gt; 1930

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1930

```

Leu Pro Gly Cys Ser Pro Gly Thr Cys Pro Ser Arg Arg Asn Thr Leu
1          5          10          15
Pro Gly Leu Gly Leu Gly Gln Gly Pro Ser Gly Pro Cys Leu Glu Cys
20          25          30
Pro Gln Gln Arg Leu Ala Ser Trp Tyr Tyr Leu Cys Gln Arg Thr Gln
35          40          45
Ala Pro Val Gln Pro Cys Leu Trp Ala Gly Ser Glu Pro Ala Pro Arg
50          55          60
Pro Arg Ala Pro Glu Ser His Arg Ser Gln Ala Arg Leu Ser Trp Gly
65          70          75          80
Cys Ser Phe Leu Lys Asn Gly Gly Phe Gly Leu Pro Ser Leu Thr Leu
85          90          95
Ala Ser Ala Pro Cys Leu Asp Ser Ser Ser Phe Phe Phe Phe Leu Ala

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100 105 110  
 Pro Leu Ser Ser Leu Arg Ala Leu  
 115 120

<210> 1931  
 <211> 719  
 <212> DNA  
 <213> Homo sapiens

<400> 1931  
 acgcgtaggc ctgagccgct ccacagccct ggggagggca gaaaaggagg aaagtaggca  
 60  
 gtgcaagaaa caggaggaaa cccccagag cgcagcctcc tggaagcgga agggagcact  
 120  
 gaagaggagg tggtagtggt tgtcagaagc tgctgagaag ccagttagat aaagcggaga  
 180  
 agcttcctac taggacagct tcctcccagc ccagtgtggc cacgctgggtg tcctcgggtga  
 240  
 ccagacacgt ggccatgaat ttctcagtgt gctttattgt tgattaaatg cagtcggctc  
 300  
 acgaggctga ctttggaac aggaggtccg tgggtcgtgg aataagaaag ggcatcatgg  
 360  
 ttgcagagga agggaaggaa gccacaggct gccttgggga gctttctgaa aggcaggctc  
 420  
 gatcatgcct ctctgggcta cggctcctc acggtggctc ctggttgga ctgaagtgg  
 480  
 ccccttggtc cctctctccc atctcagcat tagccaggac ttttggcttg gcggccccag  
 540  
 cagggtgccc cccttgcaac acttcttttc ccacatgac gtgccttcca aacctacttc  
 600  
 cagcgtcgcc ctcttcaggg agcctttcat aaccacctct cccttcact ggctaaagat  
 660  
 gaggttgagc aactgcagga cttgggacct tgttctgcc cctgtggctg cctggatcc  
 719

<210> 1932  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 1932  
 Met Pro Leu Trp Ala Thr Val Ser Ser Arg Trp Leu Leu Val Gly Thr  
 1 5 10 15  
 Glu Val Val Pro Leu Val Pro Leu Ser His Leu Ser Ile Ser Gln Asp  
 20 25 30  
 Phe Trp Leu Gly Gly Pro Ser Arg Ala Ala Pro Leu Gln His Phe Phe  
 35 40 45  
 Ser His Met Ile Val Pro Ser Lys Pro Thr Ser Ser Val Ala Leu Phe  
 50 55 60  
 Arg Glu Pro Phe Ile Thr Thr Ser Pro Phe His Trp Leu Lys Met Arg  
 65 70 75 80  
 Leu Ser Asn Cys Arg Thr Trp Asp Leu Val Pro Ala Pro Val Ala Ala  
 85 90 95  
 Trp Ile

<210> 1933  
 <211> 295  
 <212> DNA  
 <213> Homo sapiens .

<400> 1933  
 ggcgccgagc tgtgggcggc catggagcgc atgcctgccg acctgattat cctcgacctg  
 60  
 atgctgccgg gggataacgg cctcttctgtg tgccagcgcc tgcgccagca atacgcaaca  
 120  
 ccagtgatca tgctgaccgc catggggcgaa ctgagtgatc gcgtgggggg cctggaaatg  
 180  
 ggcgccgatg actacctgaa caaacctttc gatgcccggtg aattacttgc ccgggtgcgc  
 240  
 gctgtactgc gtccggcggtg tgaaaaccga ccgacgttgg gcgacgtgtc gcgcc  
 295

<210> 1934  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 1934  
 Gly Ala Glu Leu Trp Ala Ala Met Glu Arg Met Pro Ala Asp Leu Ile  
 1 5 10 15  
 Ile Leu Asp Leu Met Leu Pro Gly Asp Asn Gly Leu Leu Leu Cys Gln  
 20 25 30  
 Arg Leu Arg Gln Gln Tyr Ala Thr Pro Val Ile Met Leu Thr Ala Met  
 35 40 45  
 Gly Glu Leu Ser Asp Arg Val Gly Gly Leu Glu Met Gly Ala Asp Asp  
 50 55 60  
 Tyr Leu Asn Lys Pro Phe Asp Ala Arg Glu Leu Leu Ala Arg Val Arg  
 65 70 75 80  
 Ala Val Leu Arg Pro Ala Cys Glu Asn Arg Pro Thr Leu Gly Asp Val  
 85 90 95  
 Ser Arg

<210> 1935  
 <211> 298  
 <212> DNA  
 <213> Homo sapiens

<400> 1935  
 accggtgtgg cgggcgcggc cttcaccacc atcggtccca ccgggccgac ggcgggttcg  
 60  
 caatacatcg tcgatacctt cctggtagtgt gtgttcgggg gggcccaaag cctgttcggc  
 120  
 cccatgcctt cggcggttcgt gattgcccgag acccaatcgc tgcggagatt tttcctcagt  
 180  
 ggctcgatgg ccaaggtgct gaccttctgc tcggtgattc tgatcctgat gctgcgccc  
 240

caagggttgt tctccatcaa agtgcgcaag taaaggcgag cagataaggg ttttaagca  
298

<210> 1936  
<211> 90  
<212> PRT  
<213> Homo sapiens

<400> 1936  
Thr Gly Val Ala Gly Ala Ala Phe Thr Thr Ile Gly Ser Thr Gly Pro  
1 5 10 15  
Thr Ala Gly Ser Gln Tyr Ile Val Asp Thr Phe Leu Val Val Phe  
20 25 30  
Gly Gly Ala Gln Ser Leu Phe Gly Pro Ile Ala Ser Ala Phe Val Ile  
35 40 45  
Ala Gln Thr Gln Ser Leu Ser Glu Phe Phe Leu Ser Gly Ser Met Ala  
50 55 60  
Lys Val Leu Thr Leu Ser Ser Val Ile Leu Ile Leu Met Leu Arg Pro  
65 70 75 80  
Gln Gly Leu Phe Ser Ile Lys Val Arg Lys  
85 90

<210> 1937  
<211> 513  
<212> DNA  
<213> Homo sapiens

<400> 1937  
gcacggcgca cagtaacacc aactcgaaag agaccttatg aatgcaaggt gtgcgggaaa  
60  
gcctttaatt ctcccaattt atttcaaatt catcaaagaa ctcacactgg aaagaggtcc  
120  
tataaatgta gggaaatagt gagagccttc acagtttcca gtttctttcg aaaacatgga  
180  
aaaatgcata ctggagaaaa acgctatgaa tgtaaatact gtggaaaacc tatcgattat  
240  
cccagtttat ttcaaattca tgttagaact cactctggag aaaaacccta caaatgtaaa  
300  
caatgtggta aagccttcac ttccgcaggt tacgttcgga cacatgaaat cagatctcac  
360  
gcgctggaga aatcccacca atgtcaggaa tgtgggaaga aactcagttg ttccagttcc  
420  
cttcacagac atgaaagaac tcatagtgga ggaaaactct acgaatgtca aaaatgtgac  
480  
caagtcttta gatgtccac gtcccttcac gcg  
513

<210> 1938  
<211> 171  
<212> PRT  
<213> Homo sapiens

<400> 1938  
Ala Arg Arg Thr Val Thr Pro Thr Arg Lys Arg Pro Tyr Glu Cys Lys



1	5	10	15
Val Cys Gly Lys Ala Phe Asn Ser Pro Asn Leu Phe Gln Ile His Gln			
20	25	30	
Arg Thr His Thr Gly Lys Arg Ser Tyr Lys Cys Arg Glu Ile Val Arg			
35	40	45	
Ala Phe Thr Val Ser Ser Phe Phe Arg Lys His Gly Lys Met His Thr			
50	55	60	
Gly Glu Lys Arg Tyr Glu Cys Lys Tyr Cys Gly Lys Pro Ile Asp Tyr			
65	70	75	80
Pro Ser Leu Phe Gln Ile His Val Arg Thr His Ser Gly Glu Lys Pro			
85	90	95	
Tyr Lys Cys Lys Gln Cys Gly Lys Ala Phe Ile Ser Ala Gly Tyr Val			
100	105	110	
Arg Thr His Glu Ile Arg Ser His Ala Leu Glu Lys Ser His Gln Cys			
115	120	125	
Gln Glu Cys Gly Lys Lys Leu Ser Cys Ser Ser Ser Leu His Arg His			
130	135	140	
Glu Arg Thr His Ser Gly Gly Lys Leu Tyr Glu Cys Gln Lys Cys Asp			
145	150	155	160
Gln Val Phe Arg Cys Pro Thr Ser Leu His Ala			
165	170		

&lt;210&gt; 1939

&lt;211&gt; 1233

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1939

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gccggcagcg ccgctcccca gggagggagt ccgcagcctg aggtcttctc caagaaaaaa
60
aaagaaaaaa aaacaacatg gctgcaaagg agaaactgga ggcagtgtta aatgtggccc
120
tgaggggtgcc aagcatcatg ctgttggatg tcctgtacag atgggatgtc agctcctttt
180
tccagcagat ccaaagaagt agccttagta ataaccctct tttccagtat aagtatttgg
240
ctcttaatat gcattatgta gggtatatct taagtgtggg gctgctaaca ttgcccaggc
300
agcatctggg tcagctttat ctatatTTTT tgactgctct gtcctctat gctggacatc
360
aaatttccag ggactatgtt cggagtgaac tgggggtttgc ctatgagggga ccaatgtatt
420
tagaacctct ctctatgaat cgggtttacca cagccttaat aggtcagttg gtgggtgtgta
480
ctttatgctc ctgtgtcatg aaaacaaagc agatttggct gttttcagct cacatgcttc
540
ctctgctagc acgactctgc cttgttcctt tggagacaat tgctatcatc aataaatttg
600
ctatgatttt tactggattg gaagttctct attttcttgg gtctaattct ttggtacctt
660
ataaccttgc taaatctgca tacagagaat tgggttcagg agtggaggta tatggccttc
720
tcgccttggg aatgtccctg tggaatcaac tggtagtccc tggtcttttc atgggtttct
780

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ggctcgtctt atttgctctt cagatttact cctatttcag tactcgagat cagcctgcat  
 840  
 cactgtgagag gcttcttttc ctttttctga caaggtaatt aataagagcc tatgatacta  
 900  
 tatataacct tagaaagaga aaactttgat ctaggaatag taagttttgc agattacttt  
 960  
 tatcgttcat gttacacaac ttcgtatttt gttaagatag gattttcatt cactggatac  
 1020  
 ctaggttttg caatgcagag aggtgctaac ataataatgt ggtttatttg gctgcactat  
 1080  
 ggaccagagt gtagcaaatg atttgtggaa aggtacatag cacatcgtaa aagtattttt  
 1140  
 tcaatttcaa gttaaaatta ttgggtcaat cagaaaaaag tatattataa aaataacatt  
 1200  
 tattgagtat tttaaagtga ccataccatt naa  
 1233

<210> 1940

<211> 266

<212> PRT

<213> Homo sapiens

<400> 1940

Met	Ala	Ala	Lys	Glu	Lys	Leu	Glu	Ala	Val	Leu	Asn	Val	Ala	Leu	Arg
1			5						10					15	
Val	Pro	Ser	Ile	Met	Leu	Leu	Asp	Val	Leu	Tyr	Arg	Trp	Asp	Val	Ser
			20					25					30		
Ser	Phe	Phe	Gln	Gln	Ile	Gln	Arg	Ser	Ser	Leu	Ser	Asn	Asn	Pro	Leu
		35					40					45			
Phe	Gln	Tyr	Lys	Tyr	Leu	Ala	Leu	Asn	Met	His	Tyr	Val	Gly	Tyr	Ile
	50					55					60				
Leu	Ser	Val	Val	Leu	Leu	Thr	Leu	Pro	Arg	Gln	His	Leu	Val	Gln	Leu
65					70					75					80
Tyr	Leu	Tyr	Phe	Leu	Thr	Ala	Leu	Leu	Leu	Tyr	Ala	Gly	His	Gln	Ile
			85						90					95	
Ser	Arg	Asp	Tyr	Val	Arg	Ser	Glu	Leu	Gly	Phe	Ala	Tyr	Glu	Gly	Pro
		100						105					110		
Met	Tyr	Leu	Glu	Pro	Leu	Ser	Met	Asn	Arg	Phe	Thr	Thr	Ala	Leu	Ile
	115						120					125			
Gly	Gln	Leu	Val	Val	Cys	Thr	Leu	Cys	Ser	Cys	Val	Met	Lys	Thr	Lys
	130					135					140				
Gln	Ile	Trp	Leu	Phe	Ser	Ala	His	Met	Leu	Pro	Leu	Leu	Ala	Arg	Leu
145					150					155					160
Cys	Leu	Val	Pro	Leu	Glu	Thr	Ile	Ala	Ile	Ile	Asn	Lys	Phe	Ala	Met
			165						170					175	
Ile	Phe	Thr	Gly	Leu	Glu	Val	Leu	Tyr	Phe	Leu	Gly	Ser	Asn	Leu	Leu
		180						185					190		
Val	Pro	Tyr	Asn	Leu	Ala	Lys	Ser	Ala	Tyr	Arg	Glu	Leu	Val	Gln	Val
	195						200					205			
Val	Glu	Val	Tyr	Gly	Leu	Leu	Ala	Leu	Gly	Met	Ser	Leu	Trp	Asn	Gln
	210					215					220				
Leu	Val	Val	Pro	Val	Leu	Phe	Met	Val	Phe	Trp	Leu	Val	Leu	Phe	Ala
225					230					235					240
Leu	Gln	Ile	Tyr	Ser	Tyr	Phe	Ser	Thr	Arg	Asp	Gln	Pro	Ala	Ser	Arg

[illegible]

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<210> 1942
<211> 129
<212> PRT
<213> Homo sapiens
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<400> 1942																
Met	Met	Gly	Lys	Leu	Pro	Leu	Gly	Val	Val	Ser	Pro	Tyr	Val	Lys	Met	
1				5					10					15		
Ser	Ser	Gly	Gly	Tyr	Thr	Asp	Pro	Leu	Lys	Phe	Tyr	Ala	Thr	Ser	Tyr	
			20					25					30			
Cys	Thr	Ala	Tyr	Gly	Arg	Glu	Asp	Phe	Lys	Pro	Arg	Val	Gly	Ser	His	
		35				40						45				
Val	Gly	Thr	Gly	Tyr	Lys	Ser	Asn	Phe	Gln	Pro	Val	Val	Ser	Cys	Gln	
	50					55					60					
Ala	Ser	Leu	Glu	Ala	Leu	Asp	Asn	Pro	Ala	Arg	Gly	Glu	Gln	Ala	Gln	
65					70					75					80	
Asp	His	Phe	Gln	Ser	Val	Ala	Ser	Gln	Ser	Tyr	Arg	Pro	Leu	Glu	Val	
				85						90				95		
Pro	Asp	Gly	Lys	His	Pro	Leu	Pro	Trp	Ser	Met	Arg	Gln	Thr	Ser	Ser	
			100					105					110			
Gly	Tyr	Gly	Arg	Glu	Lys	Pro	Ser	Ala	Gly	Pro	Pro	Thr	Lys	Glu	Val	
		115						120					125			
Arg																

```
<210> 1943
<211> 386
<212> DNA
<213> Homo sapiens
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&lt;400&gt; 1943

nagaaacatt cagggctcca acaggggtgga aaacatgagg ctgcaggatg tttaacagga  
60  
gtctttgctg cagctcctct tggagccttt aacgagatac tatcatgcct atgaactgcc  
120  
acacagatgt acatggcata gcactgcccc aaagtatcag cccaaggaac cctactttcc  
180  
ccagcaacat ctaactcaga aatgctgatac tttggcctca atctgggtccc aaaatacctc  
240  
cagggatattt tgggcttcgg tgtgttcaca cacttgggtca tgtaaactctg aacacagact  
300  
ctctctgcct tggcaagaac cccccacacc cccatagata attacaccct ttggttctcc  
360  
ctctgcaatc tcacctgcta gagacg  
386

&lt;210&gt; 1944

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1944

Met	Gly	Val	Trp	Gly	Val	Leu	Ala	Lys	Ala	Glu	Arg	Val	Cys	Val	Gln
1				5					10					15	
Ile	Tyr	Met	Thr	Lys	Cys	Val	Asn	Thr	Pro	Lys	Pro	Lys	Ile	Pro	Trp
			20					25					30		
Arg	Tyr	Phe	Gly	Thr	Arg	Leu	Arg	Pro	Lys	Ile	Ser	Ile	Ser	Glu	Leu
		35				40					45				
Asp	Val	Ala	Gly	Glu	Ser	Arg	Val	Pro	Trp	Ala	Asp	Thr	Phe	Gly	Gln
	50					55				60					
Cys	Tyr	Ala	Met	Tyr	Ile	Cys	Val	Ala	Val	His	Arg	His	Asp	Ser	Ile
65					70					75				80	
Ser	Leu	Lys	Ala	Pro	Arg	Gly	Ala	Ala	Ala	Lys	Thr	Pro	Val	Lys	His
			85					90						95	
Pro	Ala	Ala	Ser	Cys	Phe	Pro	Pro	Cys	Trp	Ser	Pro	Glu	Cys	Phe	
			100					105					110		

&lt;210&gt; 1945

&lt;211&gt; 443

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1945

nacgcgtcac gaagcgcgct cggccacagt ggctccaagg gcgtccacgc gccctcctc  
60  
gaccgattgg tgtcgaacat ggcacggtgg catgcgacgc gcaccaagat ccagctcaag  
120  
ctcgcgatcc agcgantcgg catgctacag gagaaaaaag ccgcactgca taaaaaagt  
180  
cgactggaaa ttgcggacnn tcgtagacgc caaaagcttg aatctgcgcg cgtcaaaacc  
240  
gaatcgctga tcatggacga tatacatctg gagttgcttg aactgcttga gctctactgt  
300

gagacactct atgccagatt cggattacta gaaggacgcg acaatgagcc tgatgatgcg  
 360  
 atccgcgagc cgatgatcgc cattattcat gcggtcatc gcacagaggt gaaggaacta  
 420  
 catgtgctcc aaaacatgct gaa  
 443

<210> 1946  
 <211> 147  
 <212> PRT  
 <213> Homo sapiens

<400> 1946  
 Xaa Ala Ser Arg Ser Ala Leu Gly Pro Arg Gly Ser Lys Gly Val His  
 1 5 10 15  
 Ala Pro Leu Leu Asp Arg Leu Val Ser Asn Met Ala Arg Trp His Ala  
 20 25 30  
 Thr Arg Thr Lys Ile Gln Leu Lys Leu Ala Ile Gln Arg Xaa Gly Met  
 35 40 45  
 Leu Gln Glu Lys Lys Ala Ala Leu His Lys Lys Val Arg Leu Glu Ile  
 50 55 60  
 Ala Asp Xaa Arg Arg Arg Gln Lys Leu Glu Ser Ala Arg Val Lys Thr  
 65 70 75 80  
 Glu Ser Leu Ile Met Asp Asp Ile His Leu Glu Leu Leu Glu Leu Leu  
 85 90 95  
 Glu Leu Tyr Cys Glu Thr Leu Tyr Ala Arg Phe Gly Leu Leu Glu Gly  
 100 105 110  
 Arg Asp Asn Glu Pro Asp Asp Ala Ile Arg Glu Pro Met Ile Ala Ile  
 115 120 125  
 Ile His Ala Ala His Arg Thr Glu Val Lys Glu Leu His Val Leu Gln  
 130 135 140  
 Asn Met Leu  
 145

<210> 1947  
 <211> 472  
 <212> DNA  
 <213> Homo sapiens

<400> 1947  
 cgcccggtgta ggccgtgacg gtgaccaaca gagccacagc gggcccgctg taggcgggag  
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 gactgtgccg caggtgcagg agggtcagat ggaaacaaaa ggcgcaggcg gcctccacaa  
 120  
 gcgccccgtg gggcacggat gtgcgcaggg ccgagctgca gctctgggccc atgaggctct  
 180  
 gcagcagggtg caggtcactg agctcccagg cccagcagag gcgcgtcagg gtgcaggcgg  
 240  
 cctgcatgcc cagccccctgt gccgccagct tcagcagcgt gccaggcaga gactcctcgg  
 300  
 ccatgaggaa ctcttcgagg gacacggtgg ggttggccga ggccccgtcc aaggtgaccc  
 360  
 cgtgcgccag gaagagcagg aagagcaggg tgagcagcag gtcaggccca aagtccccag  
 420

cccagggccc gagctcgaac agcgtcctca tctccaggaa gcaggccccg ag  
472

<210> 1948  
<211> 150  
<212> PRT  
<213> Homo sapiens

<400> 1948  
Met Arg Thr Leu Phe Glu Leu Gly Pro Trp Ala Gly Asp Phe Gly Pro  
1 5 10 15  
Asp Leu Leu Leu Thr Leu Leu Phe Leu Leu Phe Leu Ala His Gly Val  
20 25 30  
Thr Leu Asp Gly Ala Ser Ala Asn Pro Thr Val Ser Leu Gln Glu Phe  
35 40 45  
Leu Met Ala Glu Glu Ser Leu Pro Gly Thr Leu Leu Lys Leu Ala Ala  
50 55 60  
Gln Gly Leu Gly Met Gln Ala Ala Cys Thr Leu Thr Arg Leu Cys Trp  
65 70 75 80  
Ala Trp Glu Leu Ser Asp Leu His Leu Leu Gln Ser Leu Met Ala Gln  
85 90 95  
Ser Cys Ser Ser Ala Leu Arg Thr Ser Val Pro His Gly Ala Leu Val  
100 105 110  
Glu Ala Ala Cys Ala Phe Cys Phe His Leu Thr Leu Leu His Leu Arg  
115 120 125  
His Ser Pro Pro Ala Tyr Ser Gly Pro Ala Val Ala Leu Leu Val Thr  
130 135 140  
Val Thr Ala Tyr Thr Ala  
145 150

<210> 1949  
<211> 395  
<212> DNA  
<213> Homo sapiens

<400> 1949  
acgcgttgag ggaggcgaca tgcttcatga gcgcttggcg ccactgctca agcgacatct  
60  
gccccttgct gatgttgcaa ggcggacagg acggcatgta attcgactcg acgtcacgct  
120  
ccggatgcct cgacgggacg ctcaacaagct tccattggcc attcgcgggg cgcttggtct  
180  
cgaccgcgcg tacaaccggg tctacatggt cgccatgcca ccgatcgggc aatggcattc  
240  
cacagtacgc gcagcggccg tcgtatttgc gccggagccg atcgcgctgt gctttcgtca  
300  
gccggctcac gctttatgct ccacggcagg tgtggcagca tcctggcagg cgactccaag  
360  
atccgcgcct gcgtccagct tgacggcgcc ggggt  
395

<210> 1950  
<211> 125  
<212> PRT

<213> Homo sapiens

<400> 1950

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Met Leu His Glu Arg Leu Ala Pro Leu Leu Lys Arg His Leu Pro Leu
 1           5           10           15
Ala Asp Val Ala Arg Arg Thr Gly Arg His Val Ile Arg Leu Asp Val
           20           25           30
Thr Leu Arg Met Pro Arg Arg Asp Ala His Lys Leu Pro Leu Ala Ile
           35           40           45
Arg Gly Ser Leu Gly Leu Asp Arg Ala Tyr Asn Arg Val Tyr Met Val
           50           55           60
Ala Met Pro Pro Ile Gly Gln Trp His Ser Thr Val Arg Ala Ala Ala
65           70           75           80
Val Val Phe Ala Pro Glu Pro Ile Ala Leu Cys Phe Arg Gln Pro Ala
           85           90           95
His Ala Leu Cys Ser Thr Ala Gly Val Ala Ala Ser Trp Gln Ala Thr
           100          105          110
Pro Arg Ser Ala Pro Ala Ser Ser Leu Thr Ala Pro Gly
           115          120          125

```

<210> 1951

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1951

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cggccgcccgc ctctccgctc ccggggccccc gccgccaccg cgccccccgc gggagatgga
60
acagcgggaac cggctcgggtg ccctcggata cctgccgcct ctgctgctgc atgccttgc
120
gctcttcgtg gccgacgctg cattcacaga agtccccaaa gatgtgacag tacgggaggg
180
agacgacatc gaaatgcctt gcgcgttccg ggccagcgga gccacctcgt attcgtctgga
240
gattcagtgg tggtaacctca aggagccacc ccgggagctg ctgcacgagc tggcgctcag
300
cgtgccgggc gcccgagca aggtaacaaa taaggatgca actaaaatca gcaccgtacg
360
cgt
363

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<210> 1952

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1952

```

Arg Pro Pro Pro Leu Arg Ser Arg Ala Pro Ala Ala Thr Ala Pro Pro
 1           5           10           15
Ala Gly Asp Gly Thr Ala Glu Pro Ala Arg Cys Pro Arg Ile Pro Ala
           20           25           30
Ala Ser Ala Ala Ala Cys Pro Ala Ala Leu Arg Gly Arg Arg Cys Ile
           35           40           45
His Arg Ser Pro Gln Arg Cys Asp Ser Thr Gly Gly Arg Arg His Arg

```

```

      50              55              60
Asn Ala Leu Arg Val Pro Gly Gln Arg Ser His Leu Val Phe Ala Gly
65              70              75              80
Asp Ser Val Val Val Pro Gln Gly Ala Thr Pro Gly Ala Ala Ala Arg
      85              90              95
Ala Gly Ala Gln Arg Ala Gly Arg Pro Glu Gln Gly Asn Lys
      100              105              110

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<210> 1953  
 <211> 329  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1953
acgcgtcagc ctgagcccaa taactataaa agagtcgcaa ccatgactgt gctattgagt
60
gagcgcagcc agattttccg ggggtgccgat gcctacgcgg tgtcggacta cgtcaaccag
120
catgtgggca gccactgcat tcgcctgcct cccaagggcc ggccacgggc gagtatcagc
180
catcgcacct ttgccagcct ggacctgtgc cgcatacagct acggcgctcc ggtacgggctc
240
acatcggtgg cgctggagac catctatcac ctgcagatcc tgttgagcgg gcattgccgc
300
tccagctccc gtggtgagga tgacgtggn
329

```

<210> 1954  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1954
Thr Arg Gln Pro Glu Pro Asn Asn Tyr Lys Arg Val Ala Thr Met Thr
1      5      10      15
Val Leu Leu Ser Glu Arg Ser Gln Ile Phe Arg Gly Ala Asp Ala Tyr
      20      25      30
Ala Val Ser Asp Tyr Val Asn Gln His Val Gly Ser His Cys Ile Arg
      35      40      45
Leu Pro Pro Lys Gly Arg Pro Arg Ala Ser Ile Ser His Arg Thr Phe
      50      55      60
Ala Ser Leu Asp Leu Cys Arg Ile Ser Tyr Gly Ala Pro Val Arg Val
65      70      75      80
Thr Ser Val Ala Leu Glu Thr Ile Tyr His Leu Gln Ile Leu Leu Ser
      85      90      95
Gly His Cys Arg Ser Ser Ser Arg Gly Glu Asp Asp Val
      100      105

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<210> 1955  
 <211> 415  
 <212> DNA  
 <213> Homo sapiens

<400> 1955



acgcgtggct cgacgaaaac caagtacgag acatgcccga caaggtacta tcacacatgg  
60  
tggaataactg ctggggggcgc ttcacagaca acatcaaata cgctgtagct gccaatatt  
120  
ggaaagggcc acacaagccc gatagtgacc atcaacggat cattgtaggc tatttcaaaa  
180  
ccgccaaca agccatgaac gcagcaaaac aattccactg gaacacccgg ctacaacaac  
240  
aatggaaaac atggatactc ccagtccaca acggcaccgt gtccgagttt ttcaccaac  
300  
aaaaaacttt gctagacgag caagacgata gcaatagcga gctgccggag catctacaaa  
360  
acgtcatgtg cggcaaaaaca ctccaccacc aagacgacac catatcgtgg tgcac  
415

<210> 1956

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1956

Met	Pro	Asp	Lys	Val	Leu	Ser	His	Met	Val	Glu	Tyr	Cys	Trp	Gly	Arg
1				5					10					15	
Phe	Thr	Asp	Asn	Ile	Lys	Tyr	Ala	Val	Ala	Ala	Gln	Tyr	Trp	Lys	Gly
		20						25					30		
Pro	His	Lys	Pro	Asp	Ser	Asp	His	Gln	Arg	Ile	Ile	Val	Gly	Tyr	Phe
		35					40					45			
Lys	Thr	Ala	Lys	Gln	Ala	Met	Asn	Ala	Ala	Lys	Gln	Phe	His	Trp	Asn
	50					55					60				
Thr	Arg	Leu	Gln	Gln	Gln	Trp	Lys	Thr	Trp	Ile	Leu	Pro	Val	His	Asn
65				70						75				80	
Gly	Thr	Val	Ser	Glu	Phe	Phe	Thr	Gln	Gln	Lys	Thr	Leu	Leu	Asp	Glu
			85						90					95	
Gln	Asp	Asp	Ser	Asn	Ser	Glu	Leu	Pro	Glu	His	Leu	Gln	Asn	Val	Met
			100					105					110		
Cys	Gly	Lys	Thr	Leu	His	His	Gln	Asp	Asp	Thr	Ile	Ser	Trp	Cys	
		115					120						125		

<210> 1957

<211> 526

<212> DNA

<213> Homo sapiens

<400> 1957

acgcgttccg gagagatttt cctaacctct ctccgagctg ctgagccgat cggtgaccac  
60  
caggagctcc tccctgtgag gacaaagttc cagagtcggg gtcacggggc ttacttattg  
120  
gggaggaggc ccgccggggc cgcagtgggc gaggggcccct tggcgcgctc ctgggaggtc  
180  
agacctggca cagtgtggcg aaggtttcca gtgcgatccc gagtcgaggg cgcatttcgc  
240  
ggtgactgcc agcatgaacc gcagccgacc gagttctgcg atcggggcttc tccgcagagt  
300

ggggaccctg gggaaggcgc caacttctct cctctgccca cctcactccc cgcgggcgtc  
 360  
 cctggggccgc ctgcccgggc cgcaactgggc ggcctccatc gtcccttccc tctacctgca  
 420  
 ctgccccagg cgggagagag gccttggccc nncgaggagac cagctgcagc gggcagcggg  
 480  
 gtcctgctcc cccaaccccc gccccatggc acggggctga accggt  
 526

<210> 1958

<211> 175

<212> PRT

<213> Homo sapiens

<400> 1958

Thr	Arg	Ser	Gly	Glu	Ile	Phe	Leu	Thr	Ser	Leu	Arg	Ala	Ala	Glu	Pro
1				5					10					15	
Ile	Gly	Asp	His	Gln	Glu	Leu	Leu	Pro	Val	Arg	Thr	Lys	Phe	Gln	Ser
			20					25					30		
Arg	Gly	His	Gly	Pro	Tyr	Leu	Leu	Gly	Arg	Arg	Pro	Ala	Gly	Ala	Ala
		35					40					45			
Val	Gly	Glu	Gly	Pro	Leu	Ala	Arg	Ser	Trp	Glu	Val	Arg	Pro	Gly	Thr
	50					55				60					
Val	Trp	Arg	Arg	Phe	Pro	Val	Arg	Ser	Arg	Val	Glu	Gly	Ala	Phe	Arg
65					70				75					80	
Gly	Asp	Cys	Gln	His	Glu	Pro	Gln	Pro	Thr	Glu	Phe	Cys	Asp	Arg	Ala
				85				90					95		
Ser	Pro	Gln	Ser	Gly	Asp	Pro	Gly	Glu	Gly	Ala	Asn	Phe	Ser	Pro	Leu
			100					105					110		
Pro	Thr	Ser	Leu	Pro	Ala	Gly	Val	Pro	Gly	Pro	Pro	Ala	Arg	Ala	Ala
		115					120					125			
Leu	Gly	Gly	Leu	His	Arg	Pro	Phe	Pro	Leu	Pro	Ala	Leu	Pro	Gln	Ala
	130					135					140				
Gly	Glu	Arg	Pro	Trp	Pro	Xaa	Glu	Gly	Pro	Ala	Ala	Ala	Gly	Ser	Gly
145					150				155					160	
Val	Leu	Leu	Pro	Gln	Pro	Pro	Pro	His	Gly	Thr	Gly	Leu	Asn	Arg	
				165					170				175		

<210> 1959

<211> 378

<212> DNA

<213> Homo sapiens

<400> 1959

gtgcaccgga cggctcctcc aacggatcat gcgacggccc agcggaaggc tcacccgagt  
 60  
 cgtcagaagg atcagggcgc ttgtcgtcgt cagacttcag gacatcccac gacatggtga  
 120  
 acggctggga ggagaccttg tccccgtcgg tcttggcgcc gacaacaaca ccgctcatgg  
 180  
 tgtattttcc ggcattgagt aagaaccagt gggcatgctg atgacccttg atcggcagtg  
 240  
 aggtcctttt gaccacctga tatgtgtcat cagcgaggaa ggtgccgagt ttggcgttct  
 300

cgtctgcctc ggggtgaattg ccgaggaggt acatcttgcc tggaccgta atcgcggtga  
 360  
 agtcgacgcg caacgcgt  
 378

<210> 1960  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 1960  
 Met Tyr Leu Leu Gly Asn Ser Pro Glu Ala Asp Glu Asn Ala Lys Leu  
 1 5 10 15  
 Gly Thr Phe Leu Ala Asp Asp Thr Tyr Gln Val Val Lys Gly Ala Ser  
 20 25 30  
 Leu Pro Ile Lys Gly His Gln His Ala His Trp Phe Phe Thr His Ala  
 35 40 45  
 Gly Lys Tyr Thr Met Ser Gly Val Val Val Gly Ala Lys Thr Asp Gly  
 50 55 60  
 Asp Lys Val Ser Ser Gln Pro Phe Thr Met Ser Trp Asp Val Leu Lys  
 65 70 75 80  
 Ser Asp Asp Asp Lys Arg Pro Asp Pro Ser Asp Asp Ser Gly Glu Pro  
 85 90 95  
 Ser Ala Gly Pro Ser His Asp Pro Leu Glu Glu Pro Ser Gly Ala  
 100 105 110

<210> 1961  
 <211> 384  
 <212> DNA  
 <213> Homo sapiens

<400> 1961  
 ggatccaccc cggaaaccgg caggatgaag ggggcaagtg aggagaagct ggcattctgtg  
 60  
 tccaacctgg tcaactgtgtt tgagaatagc aggaccccag aagcagcacc cagaggccag  
 120  
 aggctagagg acgtgcatca ccgccctgag tgcaggcctc ccgagtcgcc aggaccacgg  
 180  
 gagaagacga atgtcgggga ggccgtgggg tctgagccca ggacagtcag caggaggtac  
 240  
 ctgaactccc tgaagaacaa gctgtccagc gaagcctgga ggaaatcttg ccagcctgtg  
 300  
 accctctcag gatcggggac gcaggagcca gagaagaaga tcgtccagga gctgctggag  
 360  
 acagagcagg cctatgtggc gcgc  
 384

<210> 1962  
 <211> 128  
 <212> PRT  
 <213> Homo sapiens

<400> 1962  
 Gly Ser Thr Pro Glu Thr Gly Arg Met Lys Gly Ala Ser Glu Glu Lys

1		5		10		15									
Leu	Ala	Ser	Val	Ser	Asn	Leu	Val	Thr	Val	Phe	Glu	Asn	Ser	Arg	Thr
		20					25						30		
Pro	Glu	Ala	Ala	Pro	Arg	Gly	Gln	Arg	Leu	Glu	Asp	Val	His	His	Arg
		35					40					45			
Pro	Glu	Cys	Arg	Pro	Pro	Glu	Ser	Pro	Gly	Pro	Arg	Glu	Lys	Thr	Asn
		50				55					60				
Val	Gly	Glu	Ala	Val	Gly	Ser	Glu	Pro	Arg	Thr	Val	Ser	Arg	Arg	Tyr
65					70					75					80
Leu	Asn	Ser	Leu	Lys	Asn	Lys	Leu	Ser	Ser	Glu	Ala	Trp	Arg	Lys	Ser
				85					90					95	
Cys	Gln	Pro	Val	Thr	Leu	Ser	Gly	Ser	Gly	Thr	Gln	Glu	Pro	Glu	Lys
		100						105					110		
Lys	Ile	Val	Gln	Glu	Leu	Leu	Glu	Thr	Glu	Gln	Ala	Tyr	Val	Ala	Arg
		115					120						125		

&lt;210&gt; 1963

&lt;211&gt; 323

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1963

```

nnncccttcc taccctccca tactccccac ccctcttccct cccctgtgac tgagcttgca
60
ggcatgaaac acccacctgg cctctctccc tctgttttgc cccttctgtc gtctctctcc
120
cacagctgcc tggctcttcg gcgtcagtc accaccttct gcagctctcc ctcacctggg
180
cgaccactca ggcattgcac tcgcggggccc ccttcagacc tctcgggggc atcttccctt
240
tccttgccca ttatttttct tcatctgggc tgggcccggg ggggcgttcc ccccttccct
300
cttctttctt tttttttctc ttt
323

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&lt;210&gt; 1964

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1964

Xaa	Pro	Phe	Leu	Pro	Ser	His	Thr	Pro	His	Pro	Ser	Ser	Ser	Pro	Cys
1				5				10						15	
Ala	Glu	Leu	Ala	Gly	Met	Lys	His	Pro	Pro	Gly	Leu	Ser	Pro	Ser	Val
			20					25					30		
Leu	Pro	Leu	Leu	Ser	Ser	Leu	Ser	His	Ser	Cys	Leu	Ala	Leu	Arg	Arg
		35					40					45			
Gln	Ser	Thr	Thr	Phe	Cys	Ser	Ser	Pro	Ser	Pro	Trp	Arg	Pro	Leu	Arg
	50					55					60				
His	Ala	Ser	Arg	Gly	Pro	Pro	Ser	Asp	Leu	Ser	Gly	Ser	Ser	Ser	Pro
65					70				75						80
Ser	Leu	Ala	Ile	Ile	Phe	Leu	His	Leu	Gly	Trp	Ala	Arg	Arg	Gly	Val
			85					90						95	
Pro	Pro	Leu	Pro	Leu	Leu	Ser	Phe	Phe	Phe	Ser					

100

105

<210> 1965  
<211> 1416  
<212> DNA  
<213> Homo sapiens

<400> 1965  
cggctggggc aggagctgga cgacgccacc atggacctgg agcagcagcg gcagcttgtg  
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agcaccttgg agaagaagca gcgcaagttt gaccagcttc tggcagagga gaaggcagct  
120  
gtacttcggg cagtggagga acgtgagcgg gccgaggcag agggccggga gcgtgaggct  
180  
cgggccctgt cactgacacg ggcactggag gaggagcagg aggcacgtga ggagctggag  
240  
cggcagaacc gggccctgcg ggctgagctg gaggcactgc tgagcagcaa ggatgacgtc  
300  
ggcaagagcg tgcattgagct ggaacgagcc tgccgggtag cagaacaggc agccaatgat  
360  
ctgcgagcac aggtgacaga actggaggat gagctgacag cggccgagga tgccaagctg  
420  
cgtctggagg tgactgtgca ggctctcaag actcagcatg agcgtgacct gcagggccgt  
480  
gatgaggctg gtgaagagag gcggaggcag ctggccaagc agctgagaga tgcagaggtg  
540  
gagcgggatg aggagcggaa gcagcgcact ctggccgtgg ctgcccgcaa gaagctggag  
600  
ggagagctgg aggagctgaa ggctcagatg gcctctgccg gccagggcaa ggaggaggcg  
660  
gtgaagcagc ttcgcaagat gcaggcccag atgaaggagc tatggcggga ggtggaggag  
720  
acacgcacct cccgggagga gatcttctcc cagaatcggg aaagtgaaaa gcgcctcaag  
780  
ggcctggagg ctgaggtgct gcggctgcag gaggaactgg ccgcctcgga ccgtgctcgg  
840  
cggcaggccc agcaggaccg ggatgagatg gcagatgagg tggccaatgg taaccttagc  
900  
aaggcagcca ttctggagga gaagcgtcag ctggaggggg gcctggggca gttggaggaa  
960  
gagctggagg aggagcagac anactcagag ctgctcaatg accgctaccg caagctgctc  
1020  
ctgcaggtag agtcaactgac cacagagctg tcagctgagc gcagtttctc agccaaggca  
1080  
gagagcgggc ggcagcagct ggaacggcag atccaggagc tacggggacg cctgggtgag  
1140  
gaggatgctg gggcccgtgc ccgccacaag atgaccattg ctgcccttga gtctaagttg  
1200  
gcccaggctg aggagcagct agagcaagag accagagagc gcattcctctc tggaaagctg  
1260  
gtgccccaaa gtaagaagcg gtttaaagag gtggtgctcc aggtggagga ggagcggagg  
1320  
gtggctgacc agctccggga ccagctggag aagggaacc ttcgagtcaa gcagctgaag  
1380

cggcagctgg aggaggccga ggaggaggca tcccgg  
1416

<210> 1966

<211> 472

<212> PRT

<213> Homo sapiens

<400> 1966

Arg	Leu	Gly	Gln	Glu	Leu	Asp	Asp	Ala	Thr	Met	Asp	Leu	Glu	Gln	Gln
1				5					10					15	
Arg	Gln	Leu	Val	Ser	Thr	Leu	Glu	Lys	Lys	Gln	Arg	Lys	Phe	Asp	Gln
			20					25					30		
Leu	Leu	Ala	Glu	Glu	Lys	Ala	Ala	Val	Leu	Arg	Ala	Val	Glu	Glu	Arg
		35					40					45			
Glu	Arg	Ala	Glu	Ala	Glu	Gly	Arg	Glu	Arg	Glu	Ala	Arg	Ala	Leu	Ser
	50					55					60				
Leu	Thr	Arg	Ala	Leu	Glu	Glu	Glu	Gln	Glu	Ala	Arg	Glu	Glu	Leu	Glu
65					70					75					80
Arg	Gln	Asn	Arg	Ala	Leu	Arg	Ala	Glu	Leu	Glu	Ala	Leu	Leu	Ser	Ser
			85						90					95	
Lys	Asp	Asp	Val	Gly	Lys	Ser	Val	His	Glu	Leu	Glu	Arg	Ala	Cys	Arg
			100					105					110		
Val	Ala	Glu	Gln	Ala	Ala	Asn	Asp	Leu	Arg	Ala	Gln	Val	Thr	Glu	Leu
		115					120					125			
Glu	Asp	Glu	Leu	Thr	Ala	Ala	Glu	Asp	Ala	Lys	Leu	Arg	Leu	Glu	Val
	130					135					140				
Thr	Val	Gln	Ala	Leu	Lys	Thr	Gln	His	Glu	Arg	Asp	Leu	Gln	Gly	Arg
145					150					155					160
Asp	Glu	Ala	Gly	Glu	Glu	Arg	Arg	Arg	Gln	Leu	Ala	Lys	Gln	Leu	Arg
			165						170					175	
Asp	Ala	Glu	Val	Glu	Arg	Asp	Glu	Glu	Arg	Lys	Gln	Arg	Thr	Leu	Ala
			180					185					190		
Val	Ala	Ala	Arg	Lys	Lys	Leu	Glu	Gly	Glu	Leu	Glu	Glu	Leu	Lys	Ala
		195					200				205				
Gln	Met	Ala	Ser	Ala	Gly	Gln	Gly	Lys	Glu	Glu	Ala	Val	Lys	Gln	Leu
	210					215					220				
Arg	Lys	Met	Gln	Ala	Gln	Met	Lys	Glu	Leu	Trp	Arg	Glu	Val	Glu	Glu
225					230					235					240
Thr	Arg	Thr	Ser	Arg	Glu	Glu	Ile	Phe	Ser	Gln	Asn	Arg	Glu	Ser	Glu
			245						250					255	
Lys	Arg	Leu	Lys	Gly	Leu	Glu	Ala	Glu	Val	Leu	Arg	Leu	Gln	Glu	Glu
		260						265					270		
Leu	Ala	Ala	Ser	Asp	Arg	Ala	Arg	Gln	Ala	Gln	Gln	Asp	Arg	Asp	
		275					280					285			
Glu	Met	Ala	Asp	Glu	Val	Ala	Asn	Gly	Asn	Leu	Ser	Lys	Ala	Ala	Ile
	290					295					300				
Leu	Glu	Glu	Lys	Arg	Gln	Leu	Glu	Gly	Arg	Leu	Gly	Gln	Leu	Glu	Glu
305					310					315					320
Glu	Leu	Glu	Glu	Glu	Gln	Thr	Xaa	Ser	Glu	Leu	Leu	Asn	Asp	Arg	Tyr
			325						330					335	
Arg	Lys	Leu	Leu	Gln	Val	Glu	Ser	Leu	Thr	Thr	Glu	Leu	Ser	Ala	
		340					345					350			
Glu	Arg	Ser	Phe	Ser	Ala	Lys	Ala	Glu	Ser	Gly	Arg	Gln	Gln	Leu	Glu

```

          355          360          365
Arg Gln Ile Gln Glu Leu Arg Gly Arg Leu Gly Glu Glu Asp Ala Gly
  370          375          380
Ala Arg Ala Arg His Lys Met Thr Ile Ala Ala Leu Glu Ser Lys Leu
  385          390          395          400
Ala Gln Ala Glu Glu Gln Leu Glu Gln Glu Thr Arg Glu Arg Ile Leu
          405          410          415
Ser Gly Lys Leu Val Pro Lys Ser Lys Lys Arg Phe Lys Glu Val Val
          420          425          430
Leu Gln Val Glu Glu Glu Arg Arg Val Ala Asp Gln Leu Arg Asp Gln
          435          440          445
Leu Glu Lys Gly Asn Leu Arg Val Lys Gln Leu Lys Arg Gln Leu Glu
          450          455          460
Glu Ala Glu Glu Glu Ala Ser Arg
  465          470

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&lt;210&gt; 1967

&lt;211&gt; 401

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1967

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aaatttgaat cctggaaagc tgatctcgat aagtcgtttg tcgagctggt tgcggcggtg
60
ccgacgcgcc taatttggat cgtgcagtaa gagcttctcc attcctcggc gccaaaggga
120
tgcatacacat ctgcgcggcca gtcagctccc ctgggcttgc actcgtcggga gatgctggcc
180
ttgcaccaga tcctctgtgg ggcgtcgggt gtggctgggc attccagtcg gcagcttggt
240
tagtggactg taccggatct catttggctg accggaccgc cttagatagg gcgcttcgca
300
gttatcatcg ataccaccgg cattctcttg ggtggcatga acgcctcatc tctagatatg
360
caaacggccg gggttttcat gcgctcgaga agctgatgct g
401

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&lt;210&gt; 1968

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1968

```

Met His His Ile Ser Arg Pro Val Ser Ser Pro Gly Leu Ala Leu Val
  1          5          10          15
Gly Asp Ala Gly Leu Ala Pro Asp Pro Leu Trp Gly Val Gly Cys Gly
  20          25          30
Trp Ala Phe Gln Ser Ala Ala Trp Leu Val Asp Cys Thr Gly Ser His
  35          40          45
Leu Ala Asp Arg Thr Ala Leu Asp Arg Ala Leu Arg Ser Tyr His Arg
  50          55          60
Tyr His Arg His Ser Leu Gly Trp His Glu Arg Leu Ile Ser Arg Tyr
  65          70          75          80
Ala Asn Gly Arg Gly Phe His Ala Leu Glu Lys Leu Met Leu

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85

90

<210> 1969  
 <211> 464  
 <212> DNA  
 <213> Homo sapiens

<400> 1969  
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 120  
 cagggtcatgg cgaccagcgg tgatctcaaa ccgtcagtat tcgtcaacct ctctctctcg  
 180  
 gaaggacttc ctgtatcaat gatggagggt gcttccctcg gtatcccat tctcgcgact  
 240  
 ggcgtcggcg gagtaggaga aatcgtctcg tctgacaacg ggcatttatt gcctgccgag  
 300  
 ttcaccgaca ccagggcatc tgacgcgtta gtgcagctgg cactctgtc tgaggacgag  
 360  
 taccagcagg tgtgtcaggc ctcccgcag gtgtgggaag aaaagttccg cgcctctgtc  
 420  
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 464

<210> 1970  
 <211> 154  
 <212> PRT  
 <213> Homo sapiens

<400> 1970  
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 1 5 10 15  
 Thr Leu Arg Glu Val Ala Val His Arg Val Thr Asp Ala Val Thr  
 20 25 30  
 Leu Leu Gly His Val Ala Asn Thr Gln Val Met Ala Thr Gln Arg Asp  
 35 40 45  
 Leu Lys Pro Ser Val Phe Val Asn Leu Ser Ser Ser Glu Gly Leu Pro  
 50 55 60  
 Val Ser Met Met Glu Val Ala Ser Leu Gly Ile Pro Ile Ile Ala Thr  
 65 70 75 80  
 Gly Val Gly Gly Val Gly Glu Ile Val Ser Ser Asp Asn Gly His Leu  
 85 90 95  
 Leu Pro Ala Glu Phe Thr Asp Thr Gln Ala Ser Asp Ala Leu Val Gln  
 100 105 110  
 Leu Ala Arg Leu Ser Glu Asp Glu Tyr Gln Gln Val Cys Gln Ala Ser  
 115 120 125  
 Arg Gln Val Trp Glu Glu Lys Phe Arg Ala Ser Val Val Tyr Pro Glu  
 130 135 140  
 Phe Cys Arg Glu Cys Trp Gly Asp Ala Asp  
 145 150

<210> 1971  
 <211> 520



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1971

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60
acagaagtac tcaggttggt tgtgtgttga ccgagagAAC agctcagatt gaggaacgag
120
acagacgacg acaaaaacaa ttagagcatc agttgataca atacaaatgg aatataatgc
180
atctaacatt tcaaattcaa gacatgattc tgatgaaatc agtggtaaaa tgaatacata
240
tatgaattct acgacttcta agaaggatac tgggtgtgcaa acagatgact taaatatagg
300
aatattcacc aatgcagaat cacattgtgg atcattaatg gagagggaca tcacaaattg
360
ttcatctcct gagatttcgg cagaacttat tggacagttt agcaccaaga aaaacaagca
420
agaactaact caggataaag gagccagctt agaaaaagaa aacaatcggg gtaatgacca
480
gtgtaatcag ttcacaagaa ttgagaaaca aacaaaacag
520

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&lt;210&gt; 1972

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1972

```

Met Glu Tyr Asn Ala Ser Asn Ile Ser Asn Ser Arg His Asp Ser Asp
1           5           10           15
Glu Ile Ser Gly Lys Met Asn Thr Tyr Met Asn Ser Thr Thr Ser Lys
20          25          30
Lys Asp Thr Gly Val Gln Thr Asp Asp Leu Asn Ile Gly Ile Phe Thr
35          40          45
Asn Ala Glu Ser His Cys Gly Ser Leu Met Glu Arg Asp Ile Thr Asn
50          55          60
Cys Ser Ser Pro Glu Ile Ser Ala Glu Leu Ile Gly Gln Phe Ser Thr
65          70          75          80
Lys Lys Asn Lys Gln Glu Leu Thr Gln Asp Lys Gly Ala Ser Leu Glu
85          90          95
Lys Glu Asn Asn Arg Cys Asn Asp Gln Cys Asn Gln Phe Thr Arg Ile
100         105         110
Glu Lys Gln Thr Lys Gln
115

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&lt;210&gt; 1973

&lt;211&gt; 331

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1973

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acgcgtacct atgccacgcg catggcggat cagttgaccg cggcactagg cagctactta
60

```

tccgcagggtc aaaagaaatc ggacggcctc ggatccttct tcgtggccac tacccttgaa  
 120  
 gagctacaag cgatgaacag cgatactcgc ttcaccacga gcgtgggaat cgacctatcc  
 180  
 cccgctcgat ctttctccgc ttgggcgctg cgcggaacga ctttttctgc gccgtcgatg  
 240  
 acaaaggctt cccgctcgag ctcgcccgca ccaagcgac cgcgtcgctg tggcaaaagc  
 300  
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 331

<210> 1974

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1974

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Gln	Lys	Lys	Ser	Asp	Gly	Leu	Gly	Ser	Phe	Phe	Val	Ala	Thr	Thr	Leu
			20					25					30		
Glu	Glu	Leu	Gln	Ala	Met	Asn	Ser	Asp	Thr	Arg	Phe	Thr	Thr	Ser	Val
		35					40					45			
Gly	Ile	Asp	Leu	Ser	Pro	Ala	Arg	Ser	Phe	Ser	Ala	Trp	Ala	Leu	Arg
	50					55				60					
Gly	Thr	Thr	Phe	Ser	Ala	Pro	Ser	Met	Thr	Lys	Ala	Ser	Arg	Ser	Ser
65				70					75				80		
Ser	Ala	Ala	Pro	Ser	Ala	Pro	Arg	Arg	Cys	Gly	Lys	Ser	Trp	Arg	Ser
			85						90				95		
Pro	Pro	Val	Lys	Ser	Cys	Ala									
			100												

<210> 1975

<211> 370

<212> DNA

<213> Homo sapiens

<400> 1975

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 120  
 agaaggcggg tgccgacacg gcgagccgctc agcaggagat ttgcgatgcg ctggcgcaga  
 180  
 ctgcgcgcga catctcttcg caaacacagg cccacgccaa caacacgata gccgagattt  
 240  
 ctgactggt gcaggccgcc tcggaggcgc caaaggctgc tgccgaagtg gttgccgagc  
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 360  
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 370

<210> 1976

<211> 121  
 <212> PRT  
 <213> Homo sapiens

<400> 1976  
 Met Arg Val Arg Ser Ser Ser Ile Ala Arg Val Ala Asp His Ala Val  
   1                  5                  10                  15  
 Gly Gln Leu Leu Ala Gln Leu Gly Asn His Phe Gly Ser Ser Leu Trp  
                   20                  25                  30  
 Arg Leu Arg Gly Gly Leu His Gln Ser Arg Asn Leu Gly Asp Arg Val  
           35                  40                  45  
 Val Gly Val Gly Leu Cys Leu Arg Arg Asp Val Ala Arg Ser Leu Arg  
   50                  55                  60  
 Gln Arg Ile Ala Asn Leu Leu Leu Thr Ala Arg Arg Val Gly Thr Arg  
 65                  70                  75                  80  
 Leu Leu Pro Arg Leu Ala Gln Leu Gly Ala His Cys Thr Gln Arg Ile  
                   85                  90                  95  
 Gly Pro Ser Arg Gln Thr Leu Leu Val Ala Gly Leu Gln Arg Gly Leu  
           100                  105                  110  
 Gln Leu His Glu Arg Leu Ala Arg Arg  
           115                  120

<210> 1977  
 <211> 551  
 <212> DNA  
 <213> Homo sapiens

<400> 1977  
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 120  
 agagaggaga caggcagcca ggctgttaca caggaggagg cacaggaggt gcacgggagg  
 180  
 agccaagcgg gagggcaggc aatggccagg ttggaagatc tgcacctccc tggttactgg  
 240  
 aggaatgaaa ctggttggac tgactgcagg gagaggctcc agttgaaaca tgagagaagt  
 300  
 actggatgaa aaaggtgcca caactgagac cagaaggcag attcctgaac tgggtggggtg  
 360  
 ccaaggatgc atatcaaaga ctgctggaac atgtgggtat caagattgaa gacagtgaag  
 420  
 gttaaaatgg cctgatccaa agctggaggg ggggtggagt gactggtgac tgctcttccc  
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 540  
 cagactcatg a  
 551

<210> 1978  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 1978

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Met His Pro Trp His Pro Thr Ser Ser Gly Ile Cys Leu Leu Val Ser
 1           5           10           15
Val Val Ala Pro Phe Ser Ser Ser Thr Ser Leu Met Phe Gln Leu Glu
          20           25           30
Pro Leu Pro Ala Val Ser Pro Thr Ser Phe Ile Pro Pro Val Thr Arg
          35           40           45
Glu Val Gln Ile Phe Gln Pro Gly His Cys Leu Pro Ser Arg Leu Ala
 50           55           60
Pro Pro Val His Leu Leu Cys Ser Ser Leu Cys Asn Ser Leu Ala Ala
65           70           75           80
Cys Leu Leu Ser Pro Leu Thr Gln Leu Leu Thr Cys Pro Thr Pro Ala
          85           90           95
Gln Pro Thr Ser Ser
          100

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&lt;210&gt; 1979

&lt;211&gt; 5530

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1979

```

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60
atagcaaata acaaataccc ataaagtccc agtcgcgcag cccctccccg cgggcagcgc
120
actatgctgc tcgggtgggc gtccctgctg ctgtgcgcgt tccgcctgcc cctggccgcg
180
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240
gccgcccagc cccgcccggc gcagggggag gaggtgcagg agcgagccga gcctccccgc
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360
ctctactccg gcggcgccaa ggtgggctac ctcgctctac cgggcgccg gaggttcctc
420
ttggacctgg agcgagatgg ttcggtgggc attgctggct tcgtgcccgc aggaggcggg
480
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540
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900
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960

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1800  
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1920  
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1980  
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2160  
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&lt;210&gt; 1980

&lt;211&gt; 929

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1980

Met Leu Leu Gly Trp Ala Ser Leu Leu Leu Cys Ala Phe Arg Leu Pro

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Leu	Ala	Ala	Val	Gly	Pro	Ala	Ala	Thr	Pro	Ala	Gln	Asp	Lys	Ala	Gly
		20						25					30		
Gln	Pro	Pro	Thr	Ala	Ala	Ala	Ala	Ala	Gln	Pro	Arg	Arg	Arg	Gln	Gly
		35					40					45			
Glu	Glu	Val	Gln	Glu	Arg	Ala	Glu	Pro	Pro	Gly	His	Pro	His	Pro	Leu
	50					55					60				
Ala	Gln	Arg	Arg	Arg	Ser	Lys	Gly	Leu	Val	Gln	Asn	Ile	Asp	Gln	Leu
65					70					75				80	
Tyr	Ser	Gly	Gly	Gly	Lys	Val	Gly	Tyr	Leu	Val	Tyr	Ala	Gly	Gly	Arg
				85					90					95	
Arg	Phe	Leu	Leu	Asp	Leu	Glu	Arg	Asp	Gly	Ser	Val	Gly	Ile	Ala	Gly
		100						105					110		
Phe	Val	Pro	Ala	Gly	Gly	Gly	Thr	Ser	Ala	Pro	Trp	Arg	His	Arg	Ser
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His	Cys	Phe	Tyr	Arg	Gly	Thr	Val	Asp	Ala	Ser	Pro	Arg	Ser	Leu	Ala
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Val	Phe	Asp	Leu	Cys	Gly	Gly	Leu	Asp	Gly	Phe	Phe	Ala	Val	Lys	His
145					150					155				160	
Ala	Arg	Tyr	Thr	Leu	Lys	Pro	Leu	Leu	Arg	Gly	Pro	Trp	Ala	Glu	Glu
				165					170					175	
Glu	Lys	Gly	Arg	Val	Tyr	Gly	Asp	Gly	Ser	Ala	Arg	Ile	Leu	His	Val
			180					185					190		
Tyr	Thr	Arg	Arg	Ala	Ser	Ala	Ser	Arg	Pro	Cys	Arg	Arg	Ala	Pro	Ala
	195						200					205			
Ala	Lys	Pro	Pro	Arg	Pro	His	Arg	Arg	Pro	Thr	Ser	Met	Leu	Arg	Arg
	210					215					220				
Thr	Ala	Thr	Arg	Ala	Asp	Ala	Gln	His	Ala	Ser	Gln	Leu	Leu	Asp	Gln
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Ser	Ala	Leu	Ser	Pro	Ala	Gly	Gly	Ser	Gly	Pro	Gln	Thr	Trp	Trp	Arg
				245					250					255	
Arg	Arg	Arg	Arg	Ser	Ile	Ser	Arg	Ala	Arg	Gln	Val	Glu	Leu	Leu	Leu
			260					265					270		
Val	Ala	Asp	Ala	Ser	Met	Ala	Arg	Leu	Tyr	Gly	Arg	Gly	Leu	Gln	His
	275						280					285			
Tyr	Leu	Leu	Thr	Leu	Ala	Ser	Ile	Ala	Asn	Arg	Leu	Tyr	Ser	His	Ala
	290					295					300				
Ser	Ile	Glu	Asn	His	Ile	Arg	Leu	Ala	Val	Val	Lys	Val	Val	Val	Leu
305					310					315					320
Gly	Asp	Lys	Asp	Lys	Ser	Leu	Glu	Val	Ser	Lys	Asn	Ala	Ala	Thr	Thr
				325					330					335	
Leu	Lys	Asn	Phe	Cys	Lys	Trp	Gln	His	Gln	His	Asn	Gln	Leu	Gly	Asp
		340						345					350		
Asp	His	Glu	Glu	His	Tyr	Asp	Ala	Ala	Ile	Leu	Phe	Thr	Arg	Glu	Asp
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Leu	Cys	Gly	His	His	Ser	Cys	Asp	Thr	Leu	Gly	Met	Ala	Asp	Val	Gly
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Thr	Ile	Cys	Ser	Pro	Glu	Arg	Ser	Cys	Ala	Val	Ile	Glu	Asp	Asp	Gly
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Leu	His	Ala	Ala	Phe	Thr	Val	Ala	His	Glu	Ile	Gly	His	Leu	Leu	Gly
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Glu	Asp	Lys	Arg	Leu	Met	Ser	Ser	Ile	Leu	Thr	Ser	Ile	Asp	Ala	Ser



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Lys	Pro	Trp	Ser	Lys	Cys	Thr	Ser	Ala	Thr	Ile	Thr	Glu	Phe	Leu	Asp	
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Gln	Cys	Ser	Arg	Ser	Cys	Gly	Gly	Gly	Val	Gln	Phe	Ala	Tyr	Arg	His	
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 <211> 327  
 <212> DNA  
 <213> Homo sapiens

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 50 55 60  
 Ile Met Ala Trp Pro Gly Gln Arg Ala Ser Ser Gly Arg Gly Arg  
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&lt;210&gt; 1984

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1984

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Tyr	Thr	Val	Val	Asp	Leu	Asn	Arg	Phe	Tyr	Thr	Ile	Val	Val	Glu	
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&lt;210&gt; 1985

&lt;211&gt; 381

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1985

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Ile Gly Phe Met Gly Val Arg Thr Met Ile Asn Arg Tyr Leu Leu Arg
           35           40           45
Thr Pro Asp Lys Gln Ala Leu Glu Val Pro Gln Tyr Phe Trp Met Arg
           50           55           60
Val Ala Met Gly Leu Ser Leu Thr Glu Asp Asp Pro Thr Ser Ser Ala
65           70           75           80
Xaa Cys Leu Tyr Asp Ser Met Ser Asn Leu Arg His Leu Ala Ala Gly
           85           90           95
Ser Thr Leu Val Asn Ala Gly Thr His Xaa Ala Gln Leu Ser Asn Cys
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<210> 1989

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<213> Homo sapiens

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<212> PRT

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Leu	Leu	Ser	Gln	Ser	Leu	Asn	Gln	Pro	Leu	Thr	Ser	Ser	Lys	Ala	Gly
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Ser	Ser	Pro	Cys	Leu	Gly	Ser	Ser	Ser	Ala	Ala	Ser	Ser	Pro	Pro	Pro
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&lt;211&gt; 3102

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1991

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<212> PRT

<213> Homo sapiens

<400> 1992

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<213> Homo sapiens

<400> 2000

Met	Asp	Leu	Thr	Leu	Ala	Asp	Pro	Glu	Ile	Val	Val	Asn	Asn	Gly	Asp
1				5					10					15	
Asp	His	Val	Ile	Met	Ser	Val	Lys	Ser	Lys	Thr	Met	Val	Gly	Gln	Leu
			20					25					30		
Val	Asp	Tyr	Gly	Arg	Ile	Thr	Phe	Val	Asp	Met	Thr	Gly	Ser	Ile	Thr
		35				40						45			
Gln	Gly	Gln	Asn	Asp	Ala	Ala	Gln	Val	Val	Gly	Thr	Asn	Val	Lys	Leu
	50					55					60				
Asn	Ser	Gln	Ala	Val	Asp	Ala	Phe	Ala	Gly	Phe	Tyr	Gln	Ala	Gly	Lys
65					70					75				80	
Pro	Met	Asp	Asp	Ile	Asp	Ser	Ser	Leu	Lys	Leu					
				85						90					

<210> 2001

<211> 1434

<212> DNA

<213> Homo sapiens

<400> 2001

nngaataag gacgtcataa tttgctgac agcagtgcag ctgactggag gagggacaaa  
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 120  
 ttggtgactg ctggggcagg tgtcaacgag gccgactgta aaggctgctc tcccctccac  
 180  
 tacgctgccg cttctgacac ttacaggnag agcgggaaccc catacacctt ccagccatga  
 240  
 tgccgaagag ganncgagcc actgaaggag tcccgcagga aggaggcctt cttctgtctg  
 300  
 gagttcttac tggataacgg tgcagacccc tccctgcggg acaggcaggg ctacacagct  
 360  
 gtgcactatg cagccgccta tggcaacaga cagaacctcg aactgctctt agaaatgtcc  
 420  
 tttaactgcc tggaggatgt ggagagcacc attccagtca gccctttgca cttagctgcc  
 480  
 tacaacggtc actgtgaagc cttgaagacg ctggcgagga cgctggtgaa tctggacgta  
 540

agggaccaca agggccggac cgcactcttc ctggccacgg agcgcggtc tactgagtgt  
 600  
 gtggaggtgc ttacagccca cggcgccctct gccctcatca aggagcgcaa gcgcaagtgg  
 660  
 acacccctgc acgcgctgc tgcctctggc cacactgact ccctgcactt gctgatcgac  
 720  
 agtggggaac gagctgacat cacagatgtc atggatgcct atggacagac cccactgatg  
 780  
 ctggccatca tgaatggcca tgtggactgt gtacatctgc tgctagagaa aggatccaca  
 840  
 gctgatgctg ctgacctccg gggccgcact gccctccacc gcggggcagt gactggctgt  
 900  
 gaggactgcc tggctgccct gctggaccac gacgcatttg tgctgtgccg agactttaag  
 960  
 ggccgcacgc ccattcacct ggcctcagcc tgtggccaca ctgcagtact gcggaccctg  
 1020  
 ctgcaggctg ccctttccac agatcccctg gatgccgggg tggattacag cggatactcg  
 1080  
 cccatgcact gggcctccta cactggacat gaagattgtc tggagttggt acttgaacac  
 1140  
 agcccgtttt cgtacctgga aggaaacccc ttcactcctt tgcactgtgc agtgattaat  
 1200  
 aaccaagaca gcaccacaga gatgctactg ggagctctgg gtgccaagat tgtgaacagc  
 1260  
 cgagatgcca aaggacggac cccccttcac gccgctgcct tcgcggacaa tgtctctggg  
 1320  
 ctccggatgc tgctgcagca tcaagctgag gtgaacgcca ctgaccacac tggccgcact  
 1380  
 gcgctcatga cggcggtga gaacgggcag accgctgctg tggaatttct gctg  
 1434

&lt;210&gt; 2002

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2002

Xaa	Asn	Glu	Gly	Arg	His	Asn	Leu	Leu	Ile	Ser	Ser	Ala	Ala	Asp	Trp
1				5				10						15	
Arg	Arg	Asp	Lys	Phe	Gly	Arg	Thr	Pro	Leu	His	Tyr	Ala	Ala	Ala	Asn
			20					25					30		
Gly	Ser	Tyr	Gln	Cys	Ala	Val	Thr	Leu	Val	Thr	Ala	Gly	Ala	Gly	Val
			35				40					45			
Asn	Glu	Ala	Asp	Cys	Lys	Gly	Cys	Ser	Pro	Leu	His	Tyr	Ala	Ala	Ala
	50					55					60				
Ser	Asp	Thr	Tyr	Arg	Xaa	Ser	Gly	Thr	Pro	Tyr	Thr	Phe	Gln	Pro	
65					70					75					

&lt;210&gt; 2003

&lt;211&gt; 688

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2003

ntcattgacta cggagacact gaagaaaatt cagattgata ggcagttttt cagcgatgtg  
 60  
 attgcagata ccattaagga gttgcaagat tcggccactt acaacagtct cctgcaagct  
 120  
 ttgagcaaag agaggggaaaa caaaatgcat ttctatgaca tcatttccag ggaggaaaaa  
 180  
 ggaagaaaac agataatatc acttcaaaaa cagctaatta atttcaaaaa ggaatggcaa  
 240  
 tttgaagtcc agagtcagaa tgagtatatt gctaacctca aggaccaact gcaagagatg  
 300  
 aaggcaaaat ccaacttgga gaatcgctac atgaaaacca ataccgagct gcagattgcc  
 360  
 cagacccaga aaaagtgtaa cagaacagag gaactcttgg tggaagagat tgagaaactc  
 420  
 aggatgaaaa ccgaagaaga ggcccggact catacagaga ttgaaatgtt ccttagaaaag  
 480  
 gagcagcagg tgggtcccca cagcttttct atgctttgac ttttttttg tactctgctt  
 540  
 atactgagga aacaaaaaga atattttgaa ggaaaaccaa ccatcattct ttcagcctaa  
 600  
 tgaactttag ctcatgtttt ctttcagggt tatgcatctg aatagatatc ttatatagct  
 660  
 gtaatttgag agagtgcagg taaaattg  
 688

&lt;210&gt; 2004

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2004

Xaa	Met	Thr	Thr		5	Thr	Leu	Lys	Lys	Ile	Gln	Ile	Asp	Arg	Gln	Phe
1										10					15	
Phe	Ser	Asp	Val	Ile	Ala	Asp	Thr	Ile	Lys	Glu	Leu	Gln	Asp	Ser	Ala	
			20						25				30			
Thr	Tyr	Asn	Ser	Leu	Leu	Gln	Ala	Leu	Ser	Lys	Glu	Arg	Glu	Asn	Lys	
		35					40					45				
Met	His	Phe	Tyr	Asp	Ile	Ile	Ser	Arg	Glu	Glu	Lys	Gly	Arg	Lys	Gln	
	50					55					60					
Ile	Ile	Ser	Leu	Gln	Lys	Gln	Leu	Ile	Asn	Phe	Lys	Lys	Glu	Trp	Gln	
65				70					75					80		
Phe	Glu	Val	Gln	Ser	Gln	Asn	Glu	Tyr	Ile	Ala	Asn	Leu	Lys	Asp	Gln	
			85					90					95			
Leu	Gln	Glu	Met	Lys	Ala	Lys	Ser	Asn	Leu	Glu	Asn	Arg	Tyr	Met	Lys	
			100					105				110				
Thr	Asn	Thr	Glu	Leu	Gln	Ile	Ala	Gln	Thr	Gln	Lys	Lys	Cys	Asn	Arg	
	115					120					125					
Thr	Glu	Glu	Leu	Leu	Val	Glu	Glu	Ile	Glu	Lys	Leu	Arg	Met	Lys	Thr	
	130				135					140						
Glu	Glu	Glu	Ala	Arg	Thr	His	Thr	Glu	Ile	Glu	Met	Phe	Leu	Arg	Lys	
145				150					155					160		
Glu	Gln	Gln	Val	Gly	Pro	His	Ser	Phe	Ser	Met	Leu					
			165					170								

<210> 2005  
 <211> 354  
 <212> DNA  
 <213> Homo sapiens

<400> 2005  
 gctagcacca agccaagggt atgtttcctt gcttgcatgt ggggtttctg gccagtcagc  
 60  
 caagtgaact gattgacccc cagccctgtg gggaatttca ggggggtatt gtcttggtca  
 120  
 tcggagtcag ggggtggcctt tnagccaagg ctgcattaac ttttgggaaa agaaatggga  
 180  
 agcccgccgt gtcacagggt ctctgaccg gctgggtagg gtttggcctt atcttacagc  
 240  
 cagtgtgtg tttgtcaga tggacgcaca tggaaaccag gctaggatca tcttcccaat  
 300  
 gtctactccc tgctttggtc tgtcctgaaa acaattgcaa agacattgtg gctg  
 354

<210> 2006  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 2006  
 Met Phe Pro Cys Leu His Val Gly Phe Leu Ala Ser Gln Pro Ser Glu  
 1 5 10 15  
 Leu Ile Asp Pro Gln Pro Cys Gly Glu Phe Gln Gly Gly Ile Val Leu  
 20 25 30  
 Val Ile Gly Val Arg Gly Gly Leu Xaa Ala Lys Ala Ala Leu Thr Phe  
 35 40 45  
 Gly Lys Arg Asn Gly Lys Pro Ala Val Ser Gln Gly Leu Leu Thr Gly  
 50 55 60  
 Trp Val Gly Phe Gly Leu Ile Leu Gln Pro Val Leu Cys Leu Leu Arg  
 65 70 75 80  
 Trp Thr His Met Glu Thr Arg Leu Gly Ser Ser Ser Gln Cys Leu Leu  
 85 90 95  
 Pro Ala Leu Val Cys Pro Glu Asn Asn Cys Lys Asp Ile Val Ala  
 100 105 110

<210> 2007  
 <211> 335  
 <212> DNA  
 <213> Homo sapiens

<400> 2007  
 nnacgcgtgc catgtgcatg tgtatatgca tgtatgtgcg tatgtgtgtg catgtgtgtg  
 60  
 tgtatatgca tgtgtgtatg tgcattgtacg tgttngtgca tatgcgtgtg catgcatgcg  
 120  
 tgtgcgtatg tgtgcatann catgtgcaca catgtacaca cgtgtacatg ttcattgcatg  
 180  
 tgcacgtgca tatgtgtaca cgtgtatgcg tgtacatgta tgagcatatg tacacgtgtg  
 240

gatgtgtgtg tatgcatgtg tgtgtgcaca gatatgcctt ttcctttcat acaggctggt  
 300  
 ttgagtattg ctggtaggca gggacaactt tccgt  
 335

<210> 2008  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 2008  
 Xaa Arg Val Pro Cys Ala Cys Val Tyr Ala Cys Met Cys Val Cys Val  
 1 5 10 15  
 Cys Met Cys Val Cys Ile Cys Met Cys Val Cys Ala Cys Thr Cys Xaa  
 20 25 30  
 Cys Ile Cys Val Cys Met His Ala Cys Ala Tyr Val Cys Ile Xaa Met  
 35 40 45  
 Cys Thr His Val His Thr Cys Thr Cys Ser Cys Met Cys Thr Cys Ile  
 50 55 60  
 Cys Val His Val Tyr Ala Cys Thr Cys Met Ser Ile Cys Thr Arg Val  
 65 70 75 80  
 Asp Val Cys Val Cys Met Cys Val Cys Thr Asp Met Pro Phe Pro Phe  
 85 90 95  
 Ile Gln Ala Gly Leu Ser Ile Ala Gly Arg Gln Gly Gln Leu Ser  
 100 105 110

<210> 2009  
 <211> 288  
 <212> DNA  
 <213> Homo sapiens

<400> 2009  
 gacatcaccc cgctgctggc caaccccaac ggtttctccg cagcgatcga ggaactgggtg  
 60  
 ctgcgttccc cagcgacat cgacgtggtc gtcggcatgg aggcctcgcg cttcctcttc  
 120  
 gcagctccgg tcgccctggc catcggggca ggattcgtgc cggtgcgcaa gccggggaag  
 180  
 ctccccggcc aggtgtattc cgagaccttt gccatggagt acggggagga gaccctcacc  
 240  
 gtccaccagt acgccatcaa gccgggggtcg cgcgtcatca tcgtcgac  
 288

<210> 2010  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 2010  
 Asp Ile Thr Pro Leu Leu Ala Asn Pro Asn Gly Phe Ser Ala Ala Ile  
 1 5 10 15  
 Glu Glu Leu Val Leu Arg Ser Pro Arg Asp Ile Asp Val Val Val Gly  
 20 25 30  
 Met Glu Ala Arg Gly Phe Leu Phe Ala Ala Pro Val Ala Leu Ala Ile

1527

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2013

gcgtatcccc acggctacgg catgaccgcg cttatcggcc cggacctgtc caccgtcgaa  
 60  
 gccttgctcg cccaggtcca cagcacacaa accccggtgt acctggccaa tatcaatgcc  
 120  
 gataaccaga cggttatcgc gggcagcgac ggggcaatga aagcagtcgc caatctggtc  
 180  
 cgcggaacg gcgtcgccaa acgcttggcc gtcagcgtgc cgtcccattg tgcgtgctg  
 240  
 gaaaaacctg ccgaaacact ggcccaagcc ttcgtgaag tgacgtgaa aacgccgnn  
 300  
 nnncccn  
 309

&lt;210&gt; 2014

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2014

Ala	Tyr	Pro	His	Gly	Tyr	Gly	Met	Thr	Ala	Leu	Ile	Gly	Pro	Asp	Leu
1				5					10					15	
Ser	Thr	Val	Glu	Ala	Leu	Leu	Ala	Gln	Val	His	Ser	Thr	Gln	Thr	Pro
			20					25					30		
Val	Tyr	Leu	Ala	Asn	Ile	Asn	Ala	Asp	Asn	Gln	Thr	Val	Ile	Ala	Gly
		35					40					45			
Ser	Asp	Gly	Ala	Met	Lys	Ala	Val	Ala	Asn	Leu	Val	Arg	Gly	Asn	Gly
	50					55					60				
Val	Ala	Lys	Arg	Leu	Ala	Val	Ser	Val	Pro	Ser	His	Cys	Ala	Leu	Leu
65				70					75					80	
Glu	Lys	Pro	Ala	Glu	Thr	Leu	Ala	Gln	Ala	Phe	Ala	Glu	Val	Thr	Leu
				85				90						95	
Lys	Thr	Pro	Xaa	Xaa	Pro	Xaa									
				100											

&lt;210&gt; 2015

&lt;211&gt; 329

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2015

acgcgtgccca tgctcgggtat ccgccgccac caccctgtct ttgggaccgg cgagttcacc  
 60  
 gatctaggcg ggccggacat ggcagtgatg tccttcctac gtcacaacga gcacgaaacg  
 120  
 gtctgtgcc tggctaactc ctccgatact gagcggacgg ttgcccttca ccttcacaa  
 180  
 ttcgcgggcg tggcgggctc ttctctcatc catggtcagg acgcgcaacc agtaaaagct  
 240  
 gacggaacac tgtccgtacc gttgtggcca tatggctatc gatggctgca gatgtccggt  
 300



gaggagaggt catgaccgct tgggaagac  
329

<210> 2016

<211> 104

<212> PRT

<213> Homo sapiens

<400> 2016

Thr	Arg	Ala	Met	Leu	Gly	Ile	Arg	Arg	His	His	Pro	Val	Phe	Gly	Thr
1				5					10					15	
Gly	Glu	Phe	Thr	Asp	Leu	Gly	Gly	Pro	Asp	Met	Ala	Val	Met	Ser	Phe
			20					25					30		
Leu	Arg	His	Asn	Glu	His	Glu	Thr	Val	Leu	Cys	Leu	Ala	Asn	Leu	Ser
		35					40					45			
Asp	Thr	Glu	Arg	Thr	Val	Ala	Leu	His	Leu	Pro	Gln	Phe	Ala	Gly	Val
	50					55					60				
Ala	Gly	Ser	Ser	Leu	Ile	His	Gly	Gln	Asp	Ala	Gln	Pro	Val	Lys	Ala
65					70					75				80	
Asp	Gly	Thr	Leu	Ser	Val	Pro	Leu	Trp	Pro	Tyr	Gly	Tyr	Arg	Trp	Leu
			85						90					95	
Gln	Met	Ser	Gly	Glu	Glu	Arg	Ser								
			100												

<210> 2017

<211> 457

<212> DNA

<213> Homo sapiens

<400> 2017

accaaggtca gattcatggc ctcttttctt ccagcggcca gcaggaaacg cggggagccc  
60  
ttgatcatct ccgacatcaa gaaaggcagc gtggcacaca ggacgggcac cctggagcca  
120  
ggcgacaagc tactggccat tgacaatatc cgcttgga actgccccat ggaggacgcc  
180  
gtgcaaatcc tgcggcagtg cgaggacctg gtgaagctga agatccggaa ggacgaggac  
240  
aactctgatg agctggagac cacaggtgcc gtcagttaca cagtggagct gaagcgctac  
300  
gggggtcccc tgggcatcac catttcgggc acggaggaac cttttgacct cattttcatc  
360  
tcaggcctcc ccaaactgtg cctggctgag aggactggtg ccatccagtg ggggaaccgc  
420  
ttcggaccat aacaacgtta ttctcaggga cggacca  
457

<210> 2018

<211> 143

<212> PRT

<213> Homo sapiens

<400> 2018

Thr Lys Val Arg Phe Met Ala Ser Phe Pro Pro Ala Ala Ser Arg Lys

```

      1             5             10             15
Arg Gly Glu Pro Leu Ile Ile Ser Asp Ile Lys Lys Gly Ser Val Ala
      20             25             30
His Arg Thr Gly Thr Leu Glu Pro Gly Asp Lys Leu Leu Ala Ile Asp
      35             40             45
Asn Ile Arg Leu Asp Asn Cys Pro Met Glu Asp Ala Val Gln Ile Leu
      50             55             60
Arg Gln Cys Glu Asp Leu Val Lys Leu Lys Ile Arg Lys Asp Glu Asp
      65             70             75             80
Asn Ser Asp Glu Leu Glu Thr Thr Gly Ala Val Ser Tyr Thr Val Glu
      85             90             95
Leu Lys Arg Tyr Gly Gly Pro Leu Gly Ile Thr Ile Ser Gly Thr Glu
      100            105            110
Glu Pro Phe Asp Pro Ile Phe Ile Ser Gly Leu Pro Lys Arg Gly Leu
      115            120            125
Ala Glu Arg Thr Gly Ala Ile Gln Trp Gly Asn Arg Phe Gly Pro
      130            135            140

```

&lt;210&gt; 2019

&lt;211&gt; 483

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2019

```

cgcgctcggcg acgattttat cctcgggggtt cggtataaccg ccgatgaatg tctcgagaac
60
ggcaccggca aggcggaagg catcgaaatc tccagacggc tgaaggagag cggcctgac
120
gactatctca acgtcatcag gggacatatac gacaccgatc ccggcctgac cgacgtcatc
180
cccattcagg gcatggcgag cgcgccgcat cttgatttcg caggcgaaat ccgcgcggcg
240
accagcttcc ccgtcttcca tgccgcaaaa attcaggatg tcgccaccgc ccggcatgcg
300
attgccgccc gcaaggtcga catgatcggc atgaccgcg cccacatgac cgatccgcat
360
atcgtccgca agatcatgga aaaacaggag gaggacatcc gccctgcgt cggcgccaat
420
tattgtcttg atcgcattta tcaaggcggc ctcgccttct gcattcaciaa tgcggcaacc
480
ggc
483

```

&lt;210&gt; 2020

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2020

```

Arg Val Gly Asp Asp Phe Ile Leu Gly Val Arg Tyr Thr Ala Asp Glu
      1             5             10             15
Cys Leu Glu Asn Gly Thr Gly Lys Ala Glu Gly Ile Glu Ile Ser Arg
      20             25             30
Arg Leu Lys Glu Ser Gly Leu Ile Asp Tyr Leu Asn Val Ile Arg Gly

```

[illegible]

&lt;210&gt; 2021

<211> 797

&lt;212&gt; DNA

<213> Homo sapiens

<400> 2021

ngaattcggg cactggccta actcggagca cagcttcacc acgacccatg acaaggaagg  
 60  
 gttttctcctg agaagggcca gcaagtgtgt ttaaggacat cctccctcct gtccttgacg  
 120  
 ccctcctccc tcagtactcg cgagactacg aaaacacgtg ctgaaatgga ccccgcctcc  
 180  
 gggagccagt gttccgtcac ccagaagcc atactcaata atgaaaagct ggtcttgccg  
 240  
 cccgcacatc ccagagtga cggctggctg ttacccctgc actacttcca ggtgggtgacc  
 300  
 tgggctgtct tcgtgggect ttctctggcc accttcggga tcttcattcc cttcctgect  
 360  
 cacgcgtgga aatacatcgc ctatgtggta tccttttcat cgtggcatgg tctaagcggg  
 420  
 aggggttccct ggaggaccct gcgatggacc tggctgtggg gtctggggcca tggctgcccg  
 480  
 gtggcaccag tcacctgtcc tgggccagac tatgtccccc gagcctgcag gtgggccag  
 540  
 tggccccctta tggttttggc cagccccggt taaggggtcag gccaggccag cgttggtgta  
 600  
 gggagttccg gagaggggaat ctgtcaggag ggacagcagc cccctggcgt ggcgcaggac  
 660  
 ccgccctgct ggcagccttc cgctaaaatc cctgcgcagc attttgcaca tggccagccc  
 720  
 cttttctcctt gcccttggtg ccaaggagga acagcgccat gccccgcagg tcggcagcct  
 780  
 gcgtttccat gccaaagc  
 797

<210> 2022

<211> 135  
 <212> PRT  
 <213> Homo sapiens

<400> 2022

```

Met Asp Thr Arg Ser Gly Ser Gln Cys Ser Val Thr Pro Glu Ala Ile
 1          5          10          15
Leu Asn Asn Glu Lys Leu Val Leu Pro Pro Arg Ile Ser Arg Val Asn
      20          25          30
Gly Trp Ser Leu Pro Leu His Tyr Phe Gln Val Val Thr Trp Ala Val
      35          40          45
Phe Val Gly Leu Ser Ser Ala Thr Phe Gly Ile Phe Ile Pro Phe Leu
      50          55          60
Pro His Ala Trp Lys Tyr Ile Ala Tyr Val Val Ser Phe Ser Ser Trp
65          70          75          80
His Gly Leu Ser Gly Arg Gly Ser Trp Arg Thr Leu Arg Trp Thr Trp
      85          90          95
Leu Trp Gly Leu Gly His Gly Cys Pro Val Ala Pro Val Thr Cys Pro
      100          105          110
Gly Pro Asp Tyr Val Pro Arg Ala Cys Arg Trp Ala Gln Trp Pro Leu
      115          120          125
Met Val Leu Ala Ser Pro Gly
      130          135

```

<210> 2023  
 <211> 462  
 <212> DNA  
 <213> Homo sapiens

<400> 2023

```

naatctccga cgatccctgc cgacgtgctc gccggtgctc tcaagcaggc taaggaggct
60
cgcaccgcga tccttgaggt gatgaacgag gccatcgatt ctcccgatga aatggccccg
120
actgctccgc gcatcattac cgtccacatc ccagtggaca agatcgggtga ggtcatcggc
180
cccaagggca agatgattaa ccagattcag gacgacactg gcgccaatat ctctattgag
240
gacgatggca cgattttcat cggggctgat aacggagatt cggccgagtc tgcccgttcg
300
atgatcaacg cgatcgctaa cccacagatg cccgaggctc gtgagcgtaa cctcggcacc
360
gtcgtcaaga cgacgagctt tggcgctttc gtctctctgc tgcccggcaa ggatgggtctg
420
ttgcacatct ccaagatgcg tgaccttaac gacggtaaac gc
462

```

<210> 2024  
 <211> 154  
 <212> PRT  
 <213> Homo sapiens

<400> 2024

```

Xaa Ser Pro Thr Ile Pro Ala Asp Val Leu Ala Gly Ala Leu Lys Gln

```

1		5		10		15									
Ala	Lys	Glu	Ala	Arg	Thr	Ala	Ile	Leu	Glu	Val	Met	Asn	Glu	Ala	Ile
		20						25					30		
Asp	Ser	Pro	Asp	Glu	Met	Ala	Pro	Thr	Ala	Pro	Arg	Ile	Ile	Thr	Val
		35						40					45		
His	Ile	Pro	Val	Asp	Lys	Ile	Gly	Glu	Val	Ile	Gly	Pro	Lys	Gly	Lys
	50					55					60				
Met	Ile	Asn	Gln	Ile	Gln	Asp	Asp	Thr	Gly	Ala	Asn	Ile	Ser	Ile	Glu
65					70					75				80	
Asp	Asp	Gly	Thr	Ile	Phe	Ile	Gly	Ala	Asp	Asn	Gly	Asp	Ser	Ala	Glu
			85					90					95		
Ser	Ala	Arg	Ser	Met	Ile	Asn	Ala	Ile	Ala	Asn	Pro	Gln	Met	Pro	Glu
			100					105					110		
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&lt;210&gt; 2025

&lt;211&gt; 872

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2025

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<212> PRT

<213> Homo sapiens

<400> 2026

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 65 70 75 80  
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&lt;210&gt; 2030

&lt;211&gt; 794

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2030

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210								215						220			
Val	Ser	Tyr	Ala	Leu	Leu	Phe	Gly	Asp	Tyr	Leu	Pro	Gln	Asn	Ile	Gln		
225								230						235			
Ala	Ala	Arg	Glu	Met	Phe	Glu	Lys	Leu	Thr	Glu	Glu	Gly	Ser	Pro	Lys		
245								250						255			
Gly	Gln	Thr	Ala	Leu	Gly	Phe	Leu	Tyr	Ala	Ser	Gly	Leu	Gly	Val	Asn		
260								265						270			
Ser	Ser	Gln	Ala	Lys	Ala	Leu	Val	Tyr	Tyr	Thr	Phe	Gly	Ala	Leu	Gly		
275								280						285			
Gly	Asn	Leu	Ile	Ala	His	Met	Val	Leu	Gly	Tyr	Arg	Tyr	Trp	Ala	Gly		
290								295						300			
Ile	Gly	Val	Leu	Gln	Ser	Cys	Glu	Ser	Ala	Leu	Thr	His	Tyr	Arg	Leu		
305								310						315			
Val	Ala	Asn	His	Val	Ala	Ser	Asp	Ile	Ser	Leu	Thr	Gly	Gly	Ser	Val		
325								330						335			
Val	Gln	Arg	Ile	Arg	Leu	Pro	Asp	Glu	Val	Glu	Asn	Pro	Gly	Met	Asn		
340								345						350			
Ser	Gly	Met	Leu	Glu	Glu	Asp	Leu	Ile	Gln	Tyr	Tyr	Gln	Phe	Leu	Ala		
355								360						365			
Glu	Lys	Gly	Asp	Val	Gln	Ala	Gln	Val	Gly	Leu	Gly	Gln	Leu	His	Leu		
370								375						380			
His	Gly	Gly	Arg	Gly	Val	Glu	Gln	Asn	His	Gln	Arg	Ala	Phe	Asp	Tyr		
385								390						395			
Phe	Asn	Leu	Ala	Ala	Asn	Ala	Gly	Asn	Ser	His	Ala	Met	Ala	Phe	Leu		
405								410						415			
Gly	Lys	Met	Tyr	Ser	Glu	Gly	Ser	Asp	Ile	Val	Pro	Gln	Ser	Asn	Glu		
420								425						430			
Thr	Ala	Leu	His	Tyr	Phe	Lys	Lys	Ala	Asp	Met	Gly	Asn	Pro	Val			
435								440						445			
Gly	Gln	Ser	Gly	Leu	Gly	Met	Ala	Tyr	Leu	Tyr	Gly	Arg	Gly	Val	Gln		
450								455						460			
Val	Asn	Tyr	Asp	Leu	Ala	Leu	Lys	Tyr	Phe	Gln	Lys	Ala	Ala	Glu	Gln		
465								470						475			
Gly	Trp	Val	Asp	Gly	Gln	Leu	Gln	Leu	Gly	Ser	Met	Tyr	Tyr	Asn	Gly		
485								490						495			
Ile	Gly	Val	Lys	Arg	Asp	Tyr	Lys	Gln	Ala	Leu	Lys	Tyr	Phe	Asn	Leu		
500								505						510			
Ala	Ser	Gln	Gly	Gly	His	Ile	Leu	Ala	Phe	Tyr	Asn	Leu	Ala	Gln	Met		

[illegible]

<210> 2031

<211> 662

<212> DNA

<213> Homo sapiens

<400> 2031

atcatcgaaa gcagcgcccg ccagcaggat tcgattttctc gccaaactgac ccagcagttc  
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atcagccaat ggcaggcggc tcacccggcg gatcagatca ccgtgcgtga cgtggcgctg  
120  
aaccccgctgc cgcacctgga cacgcatctg ctcggcggct ggatgaaacc tgccgaacag  
180  
cgcagcgcga tcgaacaggc ttccctggac cgtccaatc aattgaccga cgaattgctc  
240  
gccgccgacg tgctggtgat ggctgcaccg atgtacaact tcgctatccc cagcaccctc  
300  
aaagcctggc tggaccacgt gttgcgtgcc ggtgtgacct tcaagtacac cgccaccggc  
360

cccagggat tgctgcacgg caagcgcgcg attgtgctga ccgctcgcg cggcattcat  
 420  
 accggcgcca gctccgatca ccaggaaccg tacctgcgcc aggtcatggc ctttatcggg  
 480  
 attcatgacg tcacgttcat tcatgccgaa ggggtgaact tgagcgggta cttccaggaa  
 540  
 aaaggcctta accacgccaa ggcgttgctg gcgcaacttg tggcatgaac cgagtcaacg  
 600  
 gttaatcgtc acataatcgc cgggtgttta tatcgcttca cgcaaaccct tcaagtacgc  
 660  
 gt  
 662

<210> 2032  
 <211> 195  
 <212> PRT  
 <213> Homo sapiens

<400> 2032  
 Ile Ile Glu Ser Ser Ala Arg Gln Gln Asp Ser Ile Ser Arg Gln Leu  
 1 5 10 15  
 Thr Gln Gln Phe Ile Ser Gln Trp Gln Ala Ala His Pro Ala Asp Gln  
 20 25 30  
 Ile Thr Val Arg Asp Val Ala Leu Asn Pro Val Pro His Leu Asp Thr  
 35 40 45  
 His Leu Leu Gly Gly Trp Met Lys Pro Ala Glu Gln Arg Ser Ala Ile  
 50 55 60  
 Glu Gln Ala Ser Leu Asp Arg Ser Asn Gln Leu Thr Asp Glu Leu Leu  
 65 70 75 80  
 Ala Ala Asp Val Leu Val Met Ala Ala Pro Met Tyr Asn Phe Ala Ile  
 85 90 95  
 Pro Ser Thr Leu Lys Ala Trp Leu Asp His Val Leu Arg Ala Gly Val  
 100 105 110  
 Thr Phe Lys Tyr Thr Ala Thr Gly Pro Gln Gly Leu Leu His Gly Lys  
 115 120 125  
 Arg Ala Ile Val Leu Thr Ala Arg Gly Gly Ile His Thr Gly Ala Ser  
 130 135 140  
 Ser Asp His Gln Glu Pro Tyr Leu Arg Gln Val Met Ala Phe Ile Gly  
 145 150 155 160  
 Ile His Asp Val Thr Phe Ile His Ala Glu Gly Val Asn Leu Ser Gly  
 165 170 175  
 Asp Phe Gln Glu Lys Gly Leu Asn His Ala Lys Ala Leu Leu Ala Gln  
 180 185 190  
 Leu Val Ala  
 195

<210> 2033  
 <211> 380  
 <212> DNA  
 <213> Homo sapiens

<400> 2033  
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 60

atgaaaaaaa gtgatttggt aaaaggatca cttcctatca aatcaatcaa cgctcatgga  
 120  
 caaaaagtca caatcaatac taaagaacct tatccagaat taaagtctga actcgcaagc  
 180  
 ccatttgctg ctatatacga cacaaaagct aaaaacaaag taactgatca acctgttggt  
 240  
 acgggtcctt atcaaattga cagttataaa cgttcgcaaa aaatcgtatt aaaacaattc  
 300  
 aaagactact ggcaaggtag gccaaaatta aaaagaatta atgtcactta tcatgaagat  
 360  
 ggtaatantc gtgttgatca  
 380

<210> 2034

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2034

Met	Lys	Lys	Ser	Asp	Leu	Leu	Lys	Gly	Ser	Leu	Pro	Ile	Lys	Ser	Ile
1				5				10					15		
Asn	Ala	His	Gly	Gln	Lys	Val	Thr	Ile	Asn	Thr	Lys	Glu	Pro	Tyr	Pro
			20					25				30			
Glu	Leu	Lys	Ser	Glu	Leu	Ala	Ser	Pro	Phe	Ala	Ala	Ile	Tyr	Asp	Thr
		35					40					45			
Lys	Ala	Lys	Asn	Lys	Val	Thr	Asp	Gln	Pro	Val	Gly	Thr	Gly	Pro	Tyr
	50					55					60				
Gln	Ile	Asp	Ser	Tyr	Lys	Arg	Ser	Gln	Lys	Ile	Val	Leu	Lys	Gln	Phe
65					70				75					80	
Lys	Asp	Tyr	Trp	Gln	Gly	Thr	Pro	Lys	Leu	Lys	Arg	Ile	Asn	Val	Thr
			85					90						95	
Tyr	His	Glu	Asp	Gly	Asn	Xaa	Arg	Val	Asp						
			100					105							

<210> 2035

<211> 495

<212> DNA

<213> Homo sapiens

<400> 2035

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 120  
 tatgctntaa tgttccccctt tcattctcgca tgtctccact tctgctgcta ttgctgttac  
 180  
 ttgtgtgttg gtgcacctaa tgggtgtccca tatttctctg atgctgtggt catttttctt  
 240  
 gattctttct actgtctggt cttcagtttg cataatccat attgttctct ctactagttc  
 300  
 actggtgctt ttgcctgcca gctctaattt actgttatcc cctttagtga aattttttct  
 360  
 ttttttctct totcattcca gttattatac agaactattc aacttcaaga tttgtggggg  
 420



tttgttttgt tttgttttga gaccccatct caaaaaaaaa aaaaaccagc tttctcctca  
 480  
 acttggggga acctt  
 495

<210> 2036  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 2036  
 Xaa Ile Pro Leu Leu Leu Ala Thr Gln Ala Gln Ala Thr Arg Ser His  
 1 5 10 15  
 Asp Thr Ser Cys Leu His Phe Phe His Val Cys Met Tyr Val Cys Met  
 20 25 30  
 Tyr Val Cys Met Tyr Val Cys Met Tyr Ala Xaa Met Phe Pro Phe His  
 35 40 45  
 Leu Ala Cys Leu His Phe Cys Cys Tyr Cys Cys Tyr Leu Cys Val Gly  
 50 55 60  
 Ala Pro Asn Gly Val Pro Tyr Phe Ser Asp Ala Val Phe Ile Phe Leu  
 65 70 75 80  
 Asp Ser Phe Tyr Cys Leu Val Phe Ser Leu His Asn Pro Tyr Cys Ser  
 85 90 95  
 Leu Tyr

<210> 2037  
 <211> 327  
 <212> DNA  
 <213> Homo sapiens

<400> 2037  
 acgcgtgaag ggaaggggga gaccccgga gaaatggaga aatgggggag cacacagacg  
 60  
 ggaagagtga ggttgaggag cctttcccg cgtcatcttc cgtccccact ccacgcccag  
 120  
 caaatccaaa caccgcgcc tctggtggcc cgggcttcca tttcccctgg aggggcaagg  
 180  
 gcgtttcctc ttccgccccaa ccggggcgct gagcggcggg aacagcggcg ggggctttgt  
 240  
 ggtcccgggg ggtccgagtg tgtgtcaggg gctggggcgg gggatgggag cggccccctgg  
 300  
 gtatccctca cggctcctggt tcatgag  
 327

<210> 2038  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 2038  
 Met Glu Lys Trp Gly Arg Thr Gln Thr Gly Arg Val Arg Leu Glu Cys  
 1 5 10 15  
 Leu Ser Arg Ala His Leu Pro Ser Pro Leu His Ala Gln Gln Ile Gln

```

                20                25                30
Thr Pro Arg Pro Leu Val Ala Arg Ala Ser Ile Ser Pro Gly Gly Ala
                35                40                45
Arg Ala Phe Pro Leu Pro Pro Asn Arg Gly Ala Glu Arg Arg Glu Gln
                50                55                60
Arg Arg Gly Leu Cys Gly Pro Gly Gly Ser Glu Cys Val Ser Gly Ala
65                70                75                80
Gly Ala Gly Asp Gly Arg Gly Pro Trp Val Ser Leu Thr Val Leu Val
                85                90                95
His Glu

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<210> 2039  
 <211> 307  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2039
accggtgata cactctgcga aagcggccgc gagcgaagcg ttcttggtct tcttcgagat
60
cgcgatgtat tgcccggaaa acagcggcctt gatgccgtca ttgagaggct ctgggccaac
120
accggtacgg gcatatgcct gggcggcatt cttttggatg ttgcaagaa aggacgcatt
180
cggcgtgccg aaagccaggg atccttcacc gtagaccttg gaccgatgga ggcccccggc
240
aatcgagtcc ttcgaaattc ccccttgga tacatgtcgg ccacgtcgt cagccagagt
300
aacgcgt
307

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<210> 2040  
 <211> 94  
 <212> PRT  
 <213> Homo sapiens

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<400> 2040
Met Ala Asp Met Tyr Ala Lys Gly Glu Phe Arg Arg Thr Arg Leu Pro
1          5          10          15
Gly Ala Ser Ile Gly Pro Arg Ser Thr Val Lys Asp Pro Trp Leu Ser
                20                25                30
Ala Arg Arg Met Arg Pro Phe Phe Ala Thr Ser Lys Arg Met Pro Pro
35          40          45
Arg His Met Pro Val Pro Val Leu Ala Gln Ser Leu Ser Met Thr Ala
50          55          60
Ser Ser Arg Cys Phe Pro Gly Asn Thr Ser Arg Ser Arg Arg Arg Pro
65          70          75          80
Arg Thr Leu Arg Ser Arg Pro Leu Ser Gln Ser Gly Ser Pro
                85                90

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<210> 2041  
 <211> 348  
 <212> DNA  
 <213> Homo sapiens

<400> 2041  
 nnccggcgat gcagggattc gcccgcgatg cgctcgaacc cggcgcgggg ggcgttcctc  
 60  
 gccagcttcc tgccgttcgc cagacgcata gccgaggcgg ggggtgcgcaa ttcgctcgcc  
 120  
 cagctgggtcg ccaagctgac cctgcccggc atgcccgcaca tctaccaggg ctgcgagatg  
 180  
 tgggacctca gcctgggtcga ccgggacaat cgccgccccg tcgactacga gacacgcgac  
 240  
 gcggccctgg ccggttgggt cgcgaccccc ccggaggaac gcgccgcggc gctgcgcacc  
 300  
 ctgctgacgg attggcgag cggcgcggtc aagctggccg tgacgcgt  
 348

<210> 2042  
 <211> 116  
 <212> PRT  
 <213> Homo sapiens

<400> 2042  
 Xaa Arg Arg Cys Arg Asp Ser Pro Ala Met Arg Ser Asn Pro Ala Arg  
 1 5 10 15  
 Gly Ala Phe Leu Ala Ser Phe Leu Pro Phe Ala Arg Arg Ile Ala Glu  
 20 25 30  
 Ala Gly Val Arg Asn Ser Leu Ala Gln Leu Val Ala Lys Leu Thr Leu  
 35 40 45  
 Pro Gly Met Pro Asp Ile Tyr Gln Gly Cys Glu Met Trp Asp Leu Ser  
 50 55 60  
 Leu Val Asp Arg Asp Asn Arg Arg Pro Val Asp Tyr Glu Thr Arg Asp  
 65 70 75 80  
 Ala Ala Leu Ala Gly Trp Val Ala Thr Pro Pro Glu Glu Arg Ala Ala  
 85 90 95  
 Ala Leu Arg Thr Leu Leu Thr Asp Trp Arg Ser Gly Ala Val Lys Leu  
 100 105 110  
 Ala Val Thr Arg  
 115

<210> 2043  
 <211> 712  
 <212> DNA  
 <213> Homo sapiens

<400> 2043  
 gatctgacgg tctcgactaa gcctgacat tccgagggtca ccgacgccga ccttgccgtc  
 60  
 gaagattcgg tgcgcagagc cctgtctcga atgcgctccc gggatgccgt ccacggcgag  
 120  
 gaacgtgccg ataccgggga tggacccgc cgggtggatca ttgatccgat cgacggcact  
 180  
 gcgaattttc tgcgtgggggt ccagtggtgg gccaccctca ttgccctcag cgtcgaggac  
 240  
 cagattgtcg catctgtggt ctctgctcct gccctcaagc gacgctgggt ggcagcccgt  
 300

ggctcaggag catggtcggg caaatccctg gcctcagcga caccgatcca cgtctcgaat  
 360  
 gtgcgcaate ttgccgacgc attcttgtcc tactcttcgc tgcacggatg ggtcgagagc  
 420  
 ggacgagggc acgggttcgg tgaactcatg cggtcggtgt ggcggaccgc agccttcggc  
 480  
 gatttctggt cttacatgat ggtggcagaa ggtgtcgtcg atgtggcatg cgagccggaa  
 540  
 ctcagcctgc acgacatggc cgccctcgac gctatcgtca ccgaggcggg cggtaagtgc  
 600  
 accggtctcg atggcaaaga cggcccgtagg tctgggaatg ctctggcgtc gaatggtttc  
 660  
 cttcatgacc aggccttagc catggtcag cctcaggagt gagcaccgat cg  
 712

&lt;210&gt; 2044

&lt;211&gt; 233

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2044

Asp	Leu	Thr	Val	Ser	Thr	Lys	Pro	Asp	His	Ser	Glu	Val	Thr	Asp	Ala
1				5					10					15	
Asp	Leu	Ala	Val	Glu	Asp	Ser	Val	Arg	Arg	Ala	Leu	Ser	Arg	Met	Arg
		20						25					30		
Ser	Arg	Asp	Ala	Val	His	Gly	Glu	Arg	Ala	Asp	Thr	Gly	Asp	Gly	
		35				40					45				
Pro	Arg	Arg	Trp	Ile	Ile	Asp	Pro	Ile	Asp	Gly	Thr	Ala	Asn	Phe	Leu
	50				55					60					
Arg	Gly	Val	Pro	Val	Trp	Ala	Thr	Leu	Ile	Ala	Leu	Ser	Val	Glu	Asp
65				70					75					80	
Gln	Ile	Val	Ala	Ser	Val	Val	Ser	Ala	Pro	Ala	Leu	Lys	Arg	Arg	Trp
			85					90					95		
Trp	Ala	Ala	Arg	Gly	Ser	Gly	Ala	Trp	Ser	Gly	Lys	Ser	Leu	Ala	Ser
		100					105						110		
Ala	Thr	Pro	Ile	His	Val	Ser	Asn	Val	Arg	Asn	Leu	Ala	Asp	Ala	Phe
		115				120					125				
Leu	Ser	Tyr	Ser	Ser	Leu	His	Gly	Trp	Val	Glu	Ser	Gly	Arg	Gly	His
	130				135					140					
Gly	Phe	Gly	Glu	Leu	Met	Arg	Ser	Val	Trp	Arg	Thr	Arg	Ala	Phe	Gly
145				150					155					160	
Asp	Phe	Trp	Ser	Tyr	Met	Met	Val	Ala	Glu	Gly	Val	Val	Asp	Val	Ala
			165					170					175	.	
Cys	Glu	Pro	Glu	Leu	Ser	Leu	His	Asp	Met	Ala	Ala	Leu	Asp	Ala	Ile
		180					185					190			
Val	Thr	Glu	Ala	Gly	Gly	Lys	Phe	Thr	Gly	Leu	Asp	Gly	Lys	Asp	Gly
		195				200					205				
Pro	Trp	Ser	Gly	Asn	Ala	Leu	Ala	Ser	Asn	Gly	Phe	Leu	His	Asp	Gln
	210				215						220				
Ala	Leu	Ala	Met	Val	Gln	Pro	Gln	Glu							
225					230										

&lt;210&gt; 2045

&lt;211&gt; 406